# Virginia's Title V Needs Assessment 2005

Office of Family Health Services

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VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

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## I. Needs Assessment Methodology

Virginia's Title V Needs Assessment for FY 06 encompassed compilation and analysis of various quantitative and qualitative data sources. For this needs assessment a special focus was placed on obtaining qualitative data from health care providers and the public. A needs assessment team made up of representatives from the Office of Family Health Services (OFHS) led the assessment effort. Each team member gathered information and solicited feedback from their perspective divisions. In addition, the OFHS Management Team reviewed the assessment and participated in setting the Title V priorities and developing the state performance measures.

Promoting efficiency and avoiding duplication of efforts, the assessment process began with collection and review of recent studies, needs assessments, and reports completed by not only the OFHS program staff, but also by other organizations and agencies serving the MCH population. One example of the reports that were completed by OFHS staff is *Injury in Virginia: Report on Injury-Related Deaths and Hospitalizations – 2003.* In 2003, the Division of Women's and Infants' Health, in conjunction with the Regional Perinatal Councils, updated the 1999 report on statewide manpower data on public and private sector perinatal providers and designated underserved areas. Other reports were completed for OFHS through contracts with academic institutions. For example, *Women's Health Virginia, 2004* and the *Prevalence of Sexual Assault Victimization in Virginia 2003* were completed through contracts with Virginia Commonwealth University's Department of Epidemiology and Community Health. Some of the reports reviewed were conducted on behalf of the Virginia General Assembly or legislative commissions such as the Virginia Commission on Youth and the Joint Commission on Health Care. Examples of these reports include *A Review of Newborn Screening in Virginia – 2004* completed by the Joint Commission on Health Care and *Protecting Children from Abuse – 2003* completed by the Governor's Advisory Board on Child Abuse and Neglect. A more detailed list of reports along with web links is available upon request.

In the spring of 2004, Governor Warner issued Executive Directive Number 2, establishing a work group to study and make recommendations regarding the crisis in obstetrical care. The interim and final reports that resulted also provided information for the needs assessment process. Dr. David Suttle, the OFHS Director, served on this work group and staff from the Division of Women's and Infants' Health provided assistance in obtaining information for the study.

The results from other surveys also provided data for the needs assessment. Some of these included the 2003 Virginia Community Youth Survey conducted by the Virginia Department of Mental Health, Mental Retardation, and Substance Abuse Services, the Virginia Tobacco Settlement Youth Tobacco Survey and the Virginia Health Care Insurance and Access Survey. In addition, the Virginia Behavioral Risk Factor Surveillance System (BRFSS) data were utilized. Several BRFSS questions provided information specific to women's health and health related behaviors. Data from specific mortality reviews by the State Child Fatality Review Team were also reviewed as a part of the needs assessment.

Other quantitative data were gathered from several sources. Birth and death data originated from the Virginia Center for Health Statistics. Special runs for indicators and outcomes by race and ethnicity, payment source, and mandated Medicaid managed care areas were completed. Hospitalization data were accessed through a state database managed by Virginia Health Information (VHI) and shared under a collaborative agreement with the Virginia Department of Health (VDH). VDH's Office of Information Management also provided data on patients and services provided through the district health departments. Data cited largely reflect the most recent five years of information available, which was generally 1999-2003. A five-year span was chosen since the last assessment was submitted with the FY 2001 Title V application. However some data may be for earlier years or varying time blocks. Data for 2004 was included when available.

The methods used to collect qualitative input into the assessment included interviewing key stakeholders, holding public hearings, conducting focus groups, and placing an online survey on the OFHS web page. The general focal points of the qualitative data gathering included determining the unmet needs of MCH populations, identifying barriers to care, and identifying areas for improvement. The OFHS contracted with the Central Virginia Health Planning Agency (CVHPA) to assist in collecting the qualitative data. CVHPA staff conducted 27 interviews of key stakeholders identified by the OFHS Needs Assessment Team. The key stakeholders included the Secretary of Health and Human Resources, representatives from state agencies including the Departments of Social Services, Mental Health, Mental Retardation, and Substance Abuse Services, Medical Assistance Services, and Education (MHMRSAS). They also included representatives from organizations such as the Primary Care Association, the Parrish Nurse Association, the Dental Association and the Virginia Chapter of the American

Academy of Pediatrics. Advocacy groups were also represented (see Appendix A – Key Stakeholder Interview Summary).

CVPA coordinated with the other four health planning agencies to host five public hearings. A news release was developed and several radio stations and newspapers provided information on the date, time, and location of the hearings. In addition, letters and emails were sent to various OFHS mailing lists. OFHS staff attended each of the hearings and provided an overview of Title V including a PowerPoint presentation. Attendees were given an opportunity to ask questions regarding Virginia's Title V programs and to present their comments regarding MCH needs and issues (see Appendix B – Public Hearing Summary).

CVPA also conducted focus groups in each of the seven Regional Perinatal Council regions. Focus group participants included health care providers from district health departments, hospitals, and private practice. The following areas were addressed by each of the focus groups: (see Appendix C – Perinatal Focus Group Summary)

- Primary concerns regarding perinatal services
- Availability of appropriate providers
- Appropriateness of prenatal/neonate services
- Characteristics of women/infants not receiving services
- Barriers to providing quality, risk appropriate care
- Strengths/weaknesses of perinatal system
- Competencies of health care professionals

The Needs Assessment Team developed online surveys to obtain input from both individuals and organizational representatives. The surveys were placed on the OFHS web site along with a PowerPoint presentation providing a comprehensive overview of Title V and Virginia's use of Title V funds. Letters and emails were sent to an extensive list of potential respondents. The correspondence requested that the recipients also forward the email to others who may have an interest in the health of mothers and children. The press release on the public hearings also provided information on how to access the online survey. A total of 69 organizational representatives and 194 individuals responded to the survey. The survey contained questions on topics such as the major health issues for the MCH populations, the most needed health service that was not received, the identification of community programs that were working well, and suggestions for how the state health department may improvement the health status of women, infants, and children. As with all online surveys, the findings have limitation due to individuals' lack of Internet access. This is especially true for the individuals who may

most frequently use the services provided by the local health departments (see Appendix D – Online Survey Summary).

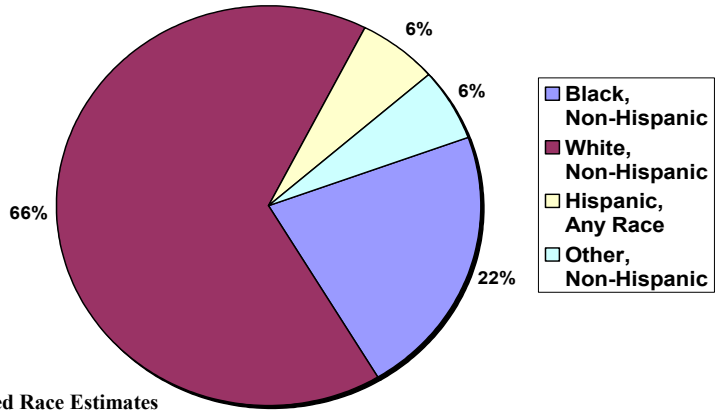
Through technical assistance funds provided by the Maternal and Child Health Bureau (MCHB), OFHS contracted with consultants Marjory Ruderman and Karen VanLandegham to conduct a Capacity Assessment for Title V (CAST-5). The CAST-5 process was tailored to OFHS' overall needs, goals for the process, and time constraints. All of the CAST-5 tools were used to examine OFHS' capacity to address 8 of the 10 essential public health services. Approximately 25 participants representing OFHS attended the two-day meeting. The CAST-5 process assisted in the identification of OFHS strengths, weaknesses, opportunities and threats that serve as a backdrop for the identification of Title V priorities and the planning of future activities to address the priorities (see Appendix E – CAST-5 Highlights).

## II. Overview of Maternal and Child Health Status

### A. Pregnant Women, Mothers, and Infants

According to National Center for Health Statistics estimates, Virginia was the residence to almost 1.6 million women ages 15-44 years in 2003. This represents only a 0.6% increase from 2000 and a 4.1% increase from 1990. As illustrated in Figure 1, two-thirds of these women identify themselves as white non-Hispanic, while racial and ethnic minorities make up the other third. Note that this data likely excludes the majority of undocumented persons, whose growth was estimated at 87% between 1996 and 2000 according to the Immigration and Naturalization Service.

**Figure 1. Virginia Female Population Ages 15-44 Years by Race/Ethnicity, 2003**



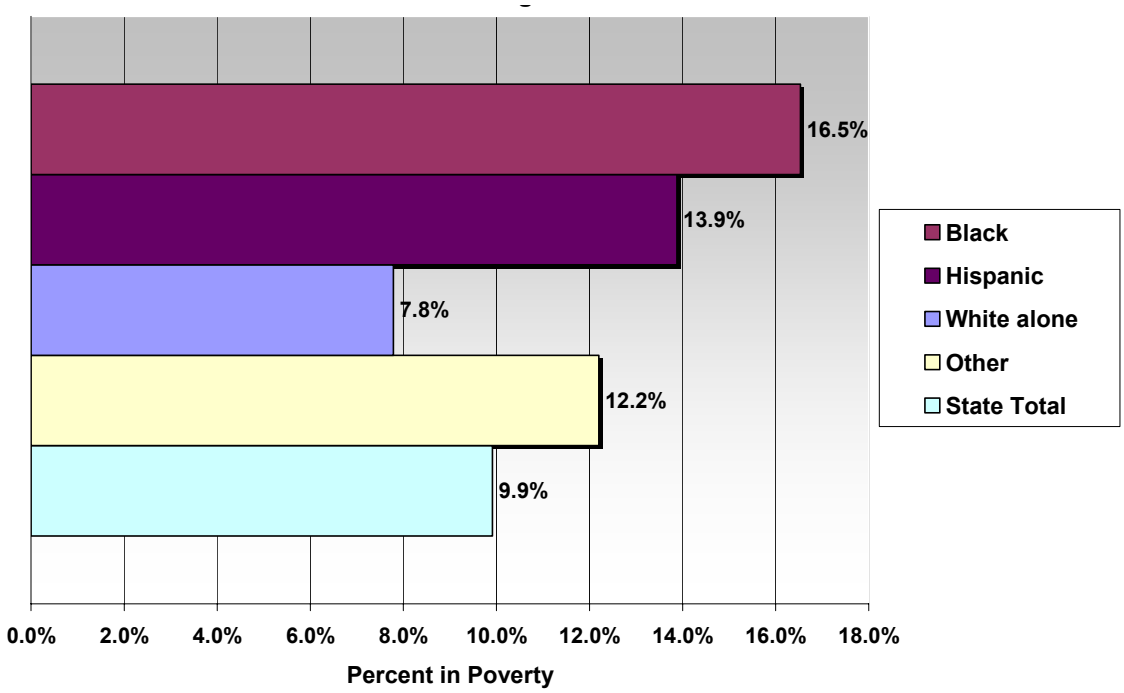

**Source: 2003 NCHS Bridged Race Estimates**

According to the United States Census Bureau's 2003 American Community Survey, 34.9%, or almost one million (973,522), of all Virginia households have one or more persons under 18 years, with the majority of these (31.8% of Virginia's households) families with their own children under 18 years. Almost 7% of Virginia's households (191,691) are represented by females with no husband present and children less than 18 years of age.

As detailed in *Women's Health 2004*, a publication prepared by the Virginia Commonwealth University's Department of Epidemiology and Community Health under contract with VDH's Division of Women's and Infant's Health, Virginia experienced an increasing trend in the number and percentage of women receiving bachelor, graduate, and professional degrees between 1990 and 2002. Those with degrees increased from 21.4% to 29.5% of all women age 25 and older. While the percentage of women with no high school diploma or equivalency fell from 24.8% in 1990 to 15.5% in 2002, this group continues to be at risk for a lifetime of poverty. Poverty generally increases a woman's likelihood of poor health status for themselves and their children, through its association with fewer educational skills and financial resources to learn about and incorporate good health habits and to navigate the health care system. Nevertheless, a favorable statistic shows that, in 2003, 58% of all births were to women with more than 12 years of education and only 4% were to mothers with less than 9 years of education.

Based on data used by *Women's Health 2004* from 2002 Virginia Housing and Population Microdata, it is estimated that 13% of women in Virginia ages 18-44 years live at or below 100% of the Federal Poverty Level (FPL) and another 16% live in households between 100% and 200% of the FPL, resulting in almost one in three being susceptible to significant economic hardships that can impact health status, such as lack of health insurance coverage. As illustrated in Figure 2, there is wide disparity in the percent of persons in poverty based on race or of Hispanic origin, with the percent for blacks being twice that of whites. Both young persons of other races and Hispanics live in poverty at a significantly higher relative frequency than white persons. Also, it is important to note that this would be a very conservative estimate of poverty if applied to young women only, since they are much more likely to be in poverty than young men due to the larger household size associated with a higher likelihood of having one or more dependents and/or the lower income traditionally earned by women at all age levels.

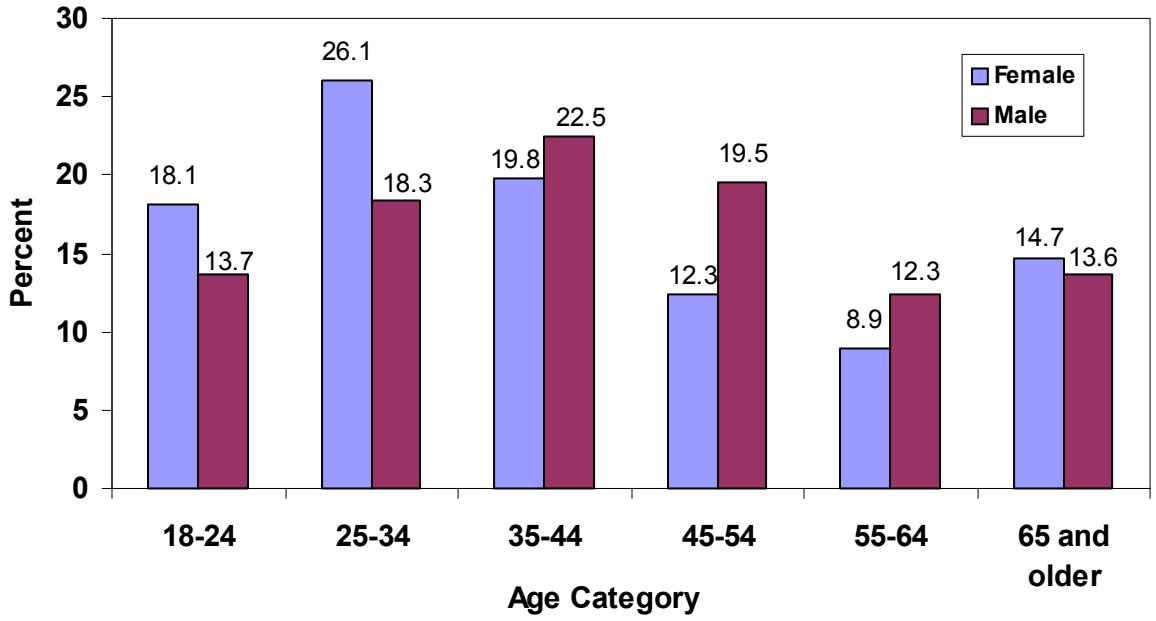
**Figure 2. Percent of Persons in Poverty Ages 18-44 Years by Race and Hispanic Origin, Virginia, 1999**




Behavioral Risk Factor Surveillance System (BRFSS) data estimates that in 2002, 11.8% of all women in Virginia did not have health insurance, just slightly lower than national estimates and significantly higher than the estimates for Virginia women in 1999 and 2001. The rate for non-elderly women is likely to be considerably higher, because the Urban Institute and Kaiser Commission estimated the uninsured rate for non-elderly women nationally at 24%. The *Report of Virginia's Governor's Work Group on Rural Obstetrical Care* (October 29, 2004; page 23) found a particularly high proportion of women ages 15-44 years who were uninsured or Medicaid enrollees in rural areas of the State. The report also noted that 39% of all births in the State in 2002 were either covered by Medicaid or were born to uninsured women.

As illustrated in Figure 3, women ages 25-34 years were the demographic group most likely to receive food stamps in Virginia in 2002, with 26.1% in receipt of this assistance.

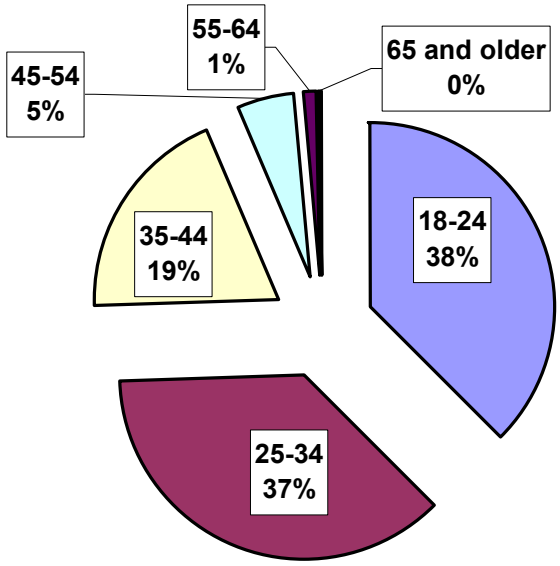
**Figure 3. Recipients of Food Stamps by Gender and Age, 2002**




**Source: Virginia Department of Social Services**

TANF is a federally and state-funded program providing cash assistance and work opportunities to needy families with an average monthly assistance in 2003 of $271 per case. In 2003, 86% of all adult Temporary Aid to Needy Families (TANF) recipients were women. Women ages 18-34 represented 75% of all women receiving TANF (see Figure 4).

**Figure 4. Women Recipients of Temporary Aid to Needy Families, Virginia, 2003**




**Source: Virginia Department of Social Services**

As shown in the Table 1, females 15-44 years are generally healthy with more than 50% of all inpatient discharges being pregnancy related. However, there are several high frequency diagnoses that are of particular concern and point to issues that could have a negative long-term impact on women's health status, including mental health discharges (more than 13,000 discharges) and surgical procedures for obesity (approximately 2,500 discharges). The need for additional community-based resources for mental health care in Virginia is an issue across all age and gender groups, but is of particular concern in young women who are often responsible for the care of infants and children. Mental health issues sometimes can lead to neglect or abuse and/or impede a woman's ability to provide for their health needs or those of her family. Finally, obesity and other nutritional issues also have a significant impact on young women and their children since eating habits are learned early in life and nutrition influences development, learning, chronic illness and a host of other issues that can have a long term impact on health.

**Table 1: Inpatient Hospital Discharges, Females 15-44 years by DRG, Virginia, 2003**

| DRG | N | % |
|---|---|---|
| Vaginal delivery without complicating diagnoses | 53,962 | 29.8 |
| Cesarean section without complications, comorbidities | 21,060 | 11.6 |
| Psychoses | 11,766 | 6.5 |
| Uterine and adnexa procedure for non-malignancy without complications, comorbidities | 7,290 | 4.0 |
| Vaginal delivery with complicating diagnoses | 7,257 | 4.0 |
| Cesarean section with complications, comorbidities | 5,925 | 3.3 |
| Other antepartum diagnoses with medical complications | 4,564 | 2.5 |
| Vaginal delivery with sterilization and/or dilation and curettage | 2,955 | 1.6 |
| Uterine and adnexa procedure for non-malignancy with complications, comorbidities | 2,534 | 1.4 |
| Operating room procedures for obesity | 2,502 | 1.4 |
| Threatened abortion | 1,986 | 1.1 |
| Esophagitis, gastroenteritis, and miscellaneous digestive disorders age >17 with complications | 1,790 | 1.0 |
| Esophagitis, gastroenteritis, and miscellaneous digestive disorders age >17 without complications | 1,672 | 0.9 |
| Chest pain | 1,531 | 0.8 |
| Depressive neuroses | 1,415 | 0.8 |
| Laparoscopic cholecystectomy without common duct exploration without complications, comorbidities | 1,168 | 0.6 |
| Postpartum and post-abortion diagnoses without operating room procedure | 1,111 | 0.6 |
| Bronchitis and asthma age >17 without complications, comorbidities | 1,030 | 0.6 |
| Poisoning and toxic effects of drugs age >17 with complications, comorbidities | 1,008 | 0.6 |
| All Others | 48,358 | 26.7 |
| TOTAL | 180,884 | 100.0 |

**Source: Virginia Health Information Inpatient Database, 2003**

Based upon data from the VDH's Center for Health Statistics, in 2003, 134,635 pregnancies occurred to residents of Virginia, a 5.5% increase from five years previously, far outpacing the growth in the number of women 15-44 years of age. Of these pregnancies, 100,561 (74.7%, up from 73.8% in 1998) resulted in a live birth. At the same time, 26,281 of Virginia's

pregnancies resulted in induced terminations (19.5%, down from 20.3% in 1998), while the other 7,524 (5.8%, similar to 5.9% in 1998) were natural fetal deaths. With approximately one in twenty pregnancies resulting in a natural fetal death and no relative decline in the representation of this pregnancy outcome, there will be increased focus on how to effectively address fetal deaths likely to be preventable.

White women accounted for two-thirds (66.2%) of all pregnancies in 2003, while black women represented one in four pregnancies (25.4%) and other races represented the remaining 8.4% of all pregnancies by Virginia residents. Hispanics of all races accounted for 9.0% of all pregnancies, more than 50% greater than their 5.8% representation in 1998. When examining pregnancies that don't result in a live birth, some relative racial differences appear. While white women represented two-thirds of all pregnancies, they represented almost three-fourths (73.5%) of all natural fetal deaths. On the other hand, black women represented a quarter of all pregnancies, but represented 41.2% of all induced terminations. These differences may reflect differences in maternal age, level of health education, financial resources, marital status, access to reliable birth control, work and social environment, and/or cultural differences.

The 2003 pregnancy rate in Virginia was 84.2 per 1,000 females aged 15-44 years, the highest rate since 1993. As detailed in Table 2 below, females aged 25-29 years had the highest age-specific rate (139.9 per 1,000 females), while the largest number of pregnancies were among women 20 to 24 years of age. Women ages 20-24 years had the highest induced termination rate of 35.4 per 1,000, followed by women ages 18-19 years. The largest percentage of pregnancies that resulted in induced terminations were experienced among the youngest age groups, reducing steadily until ages 30-34 years and then increasing with age. However, even the percentage of induced terminations for women 45+ years, who are more likely to have fetal development issues, is lower than all groups 24 years and younger. This likely reflects differences in access to and/or use of reliable birth control, desire and/or preparation to be a parent, marital status, and/or access to financial resources to provide for a child.

**Table 2: Pregnancy Outcomes per 1,000 Females, Virginia, 2003**

| Age | Number of Pregnancies | Pregnancy Rate per 1000 females | Number of Births | Birth Rate per 1000 | Number of Induced Terminations | % of Pregnancies with Induced Termination | Number of Natural Fetal Deaths | % of Pregnancies with Natural Fetal Death |
|---|---|---|---|---|---|---|---|---|
| Under 15 | 284 | 1.1 | 147 | 0.6 | 122 | 43.0% | 15 | 5.3% |
| Ages 15-17 | 4,017 | 27.1 | 2,570 | 17.4 | 1,278 | 31.8% | 169 | 4.2% |
| Ages 18-19 | 9,634 | 96.8 | 6,224 | 64.3 | 2,763 | 28.7% | 377 | 3.9% |
| Ages 20-24 | 33,864 | 134.9 | 23,675 | 94.3 | 8,888 | 26.2% | 1,301 | 3.8% |
| Ages 25-29 | 33,328 | 139.9 | 25,592 | 107.7 | 5,955 | 17.9% | 1,691 | 5.1% |
| Ages 30-34 | 31,781 | 119.3 | 25,927 | 97.3 | 3,882 | 12.2% | 1,972 | 6.2% |
| Ages 35-39 | 16,901 | 58.7 | 13,174 | 45.7 | 2,250 | 13.3% | 1,477 | 8.7% |
| Ages 40-44 | 4,317 | 13.9 | 2,876 | 9.3 | 777 | 18.0% | 664 | 15.4% |
| Ages 45 + | 239 | 0.8 | 143 | 0.5 | 47 | 19.7% | 49 | 20.5% |
| Unknown | 630 | | 233 | | 319 | 50.6% | 78 | 12.4% |
| **Total** | **134,635** | **84.2** | **100,561** | **62.9** | **26,281** | **19.5%** | **7,793** | **5.8%** |

Source Data: Virginia Center for Health Statistics
Percent Calculations by Central Virginia Health Planning Agency

The natural fetal death rate is highest among women age 30-34 years, followed closely by those ages 25-29 years. When, examining natural fetal death as a percentage of total pregnancies by age group, the lowest percentage is among women 20-24 years (3.8%), increasing to 5.3% of females less than 15 years and to 20.5% among women 45+ years of age.

Teens accounted for 10.1% of all pregnancies in 2003 (down from 12.3% in 1998*)* and the pregnancy rate for teenagers was 27.4 per 1,000 females, compared to 34.1 per 1,000 females in 1998 (a 20% drop). Moreover, it appears that the rate for induced terminations by teenagers has dropped more than for women overall over the last five and twenty years, likely attributable to the lower pregnancy rate.

Four out of ten (41.4 percent) pregnancies were to unmarried females in 2003*,* according to data from the Virginia Center for Health Statistics, similar to the percentage in 1998-2000, but up slightly over the percentage in 2001 and 2002. While unmarried white women represented approximately one in three (32%) of all pregnancies in that demographic group, unmarried women represented only 15% of all Asian pregnancies but represented 71% of all pregnancies of black women. These differences in the percentage of pregnancies by martial status among racial groups have not changed significantly over the last fifteen years. Nevertheless, marital status can have a significant impact on the level of resources and support available to perspective mothers and their offspring.

With the exception of 2001, there have been a steadily increasing number of resident live births over the past five years (see Table 3). There has been a 5.6% increase over the five-year period, slightly greater than the percentage increase in pregnancies.

**Table 3. Number of Live Births by Race/Ethnicity**

| | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|
| White, Non-Hispanic | 61,643 | 63,101 | 61,350 | 61,120 | 61,550 |
| Black, Non-Hispanic | 21,864 | 22,180 | 21,889 | 21,710 | 21,611 |
| Hispanic, Any Race | 6,537 | 7,707 | 9,112 | 9,743 | 10,362 |
| Other/Unknown, Non-Hispanic | 5,163 | 5,876 | 6,180 | 6,662 | 7,038 |
| Total | 95,207 | 98,864 | 98,531 | 99,235 | 100,561 |

**Source: Virginia Department of Health, Center for Health Statistics**

Although the majority of live births were to white, non-Hispanic women (61.2%) in 2003, non-black minorities accounted for a growing percentage of live births. In 2003, 21.5% of all births were to black, non-Hispanic women (compared to 23.0% in 1999) while 7.0% were to women of other races (non-Hispanic) and 10.3% were to Hispanic women. The percentage of births to Hispanic women has grown dramatically, from 6.9% of all births in 1999. Births to women of other non-white and non-black races have increased substantially (from 0.4% of all births in 1999).

As shown in Table 4, the fertility rate (births per 1000 females ages 15-44 years) for young Hispanic women is 70% higher than the State's overall fertility rate, while the rate for young women of other races is 21% higher than the overall rate. While this may represent differences in culture and/or access to birth control, the rate may also reflect a larger number of "other" (non-white/non-black) and Hispanic women that are not documented in population estimates.

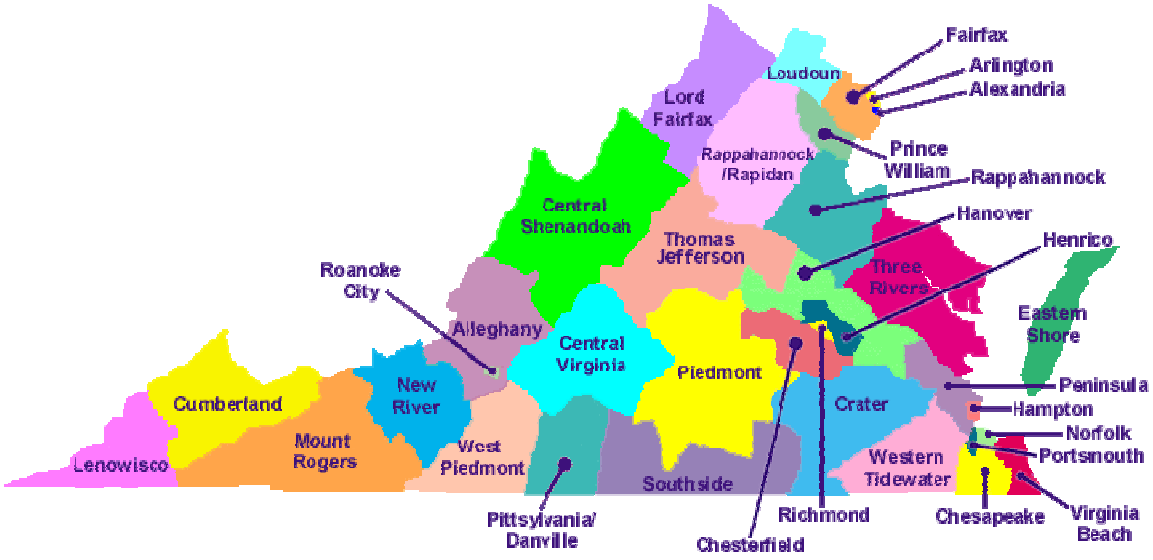
**Table 4. Fertility Rate per 1,000 Females, ages 15-44 Yrs by Race/ Ethnicity, Virginia, 1999-2003**

| | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|
| White, Non-Hispanic | 56.9 | 58.6 | 57.3 | 57.4 | 58.2 |
| Black, Non-Hispanic | 63.8 | 64.5 | 63.1 | 62.2 | 61.5 |
| Hispanic, Any Race | 82.7 | 90.2 | 102.5 | 105.2 | 107.0 |
| Other/Unknown, Non-Hispanic | 65.4 | 69.8 | 71.2 | 74.3 | 76.3 |
| Total | 60.1 | 62.1 | 61.8 | 62.2 | 62.9 |

**Source: Virginia Department of Health, Center for Health Statistics**

Virginia's health districts with a particularly high birth rate per 1,000 population include areas of Northern Virginia (with Loudoun Health District having the highest in the State) and large cities throughout the State. Health districts with a particularly high rate of Hispanic births include many rural areas (such as Pittsylvania/Danville, Eastern Shore, Central Shenandoah, Lord Fairfax) in addition to some more urban areas (such as Richmond City and Prince William). The following map illustrates the State's health districts.

**Figure 5. Health Districts, Virginia Department of Health, 2005**




According to data from the Virginia Center for Health Statistics, women aged 25-29 have the highest age-specific live birth rate (107.7 per 1,000 females in 2003) of any age cohort, while fertility rates continued to rise among females in their thirties and forties. The live birth rate for women ages 30-34 years exceeded the rate for women ages 20-24 years for the first time in 2003 (97.3 compared to 94.3). As the reproductive cohort in Virginia continues to age and women in the second half of their reproductive years increase their fertility, attention to the special health needs and more tailored perinatal assessments for these women have become increasingly important. Conversely, live birth rates among those less than 15 years and 15-17 year olds fell to new lows in 2003 of 0.6 and 17.4, respectively. Even the birth rate among 18-19 year olds fell to 64.3 in 2003, the lowest level since 1997. These reductions in overall teen births have the potential to improve the health status of Virginia's maternal and child health population as teen

parents are often ill-equipped economically and emotionally to raise a child, particularly without significant support from their families and communities.

As shown in Table 5, while the birth rate for teens 15-19 years has dropped significantly, there is wide disparity among racial and ethnic groups. The rate for Hispanic teens has increased by 30% while falling for all other groups by approximately 20% from 1999 to 2003. This raises the question as to whether the rate for Hispanic teenagers is actually increasing to the degree suggested by the data or whether the population used in the rate assessment fails to include the rapidly growing number of undocumented young Hispanic women in Virginia. Finally, while the birth rate for teenagers of "other" (non-white, non-black, non-Hispanic) races is only a third of the State's overall 2003 rate, the rate for black teenagers is two-thirds higher than the State rate.

**Table 5. Teenage (15-19yrs) Birth Rate per 1,000 by Race/Ethnicity, Virginia, 1999-2003**

| | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|
| White, Non-Hispanic | 15.1 | 14.5 | 13.5 | 13.0 | 12.1 |
| Black, Non-Hispanic | 36.3 | 34.2 | 32.3 | 30.1 | 28.9 |
| Hispanic, Any Race | 29.7 | 31.1 | 37.9 | 34.3 | 38.6 |
| Other/Unknown, non-Hispanic | 8.2 | 7.5 | 8.2 | 7.9 | 6.4 |
| Total | 20.6 | 19.8 | 19.1 | 18.0 | 17.3 |

**Source: Virginia Department of Health, Center for Health Statistics**

The proportion of all births to teens steadily declined to 8.9% in 2003 from 10.6% in 1999 and the number of teen births (n = 8,941) represented a decrease of 1,149 births. Moreover, 82% of these births were the first birth for the teenage mother, ranging from 84% for white teens to 79% for black teens. The decrease in teenage live births was seen across all racial groups, with the exception of those teens who did not identify their race as white, black, Asian, or Native American. Virginia has made significant progress in reducing teen pregnancy and parenthood through its collaborative community programs such as Resource Mothers, Healthy Families, and CHIP of Virginia. Nevertheless, there are still geographic areas and socio-demographic groups that require targeted efforts. Those local health districts with particularly high rates of births to females 15-17 years are scattered throughout the State (refer to the previous map of Virginia's local health districts on page 15) and include Richmond City, Roanoke City, Eastern Shore, and

Portsmouth. This may be due to the high rates among black and/or Hispanic teenagers that reside in these areas.

As illustrated in Table 6, 84.8% of all pregnant women initiated prenatal care in the first trimester in 2003, the same percentage as 1998**.** Virginia did not meet the Healthy People 2010 objective of 90% starting care in the first trimester and the percentage of women starting care in the second trimester dropped to 11.2%, down slightly from 11.4% in 1998. However, the percent of mothers receiving no care at all decreased slightly to 0.9% in 2003 from 1.1% in 1998. Black pregnant women were most likely to receive no care while other minorities and Hispanic women were the demographic groups most likely to not receive care until the third trimester.

**Table 6. Resident Births By Trimester Care Began by Race/Ethnicity, Virginia, 2003**

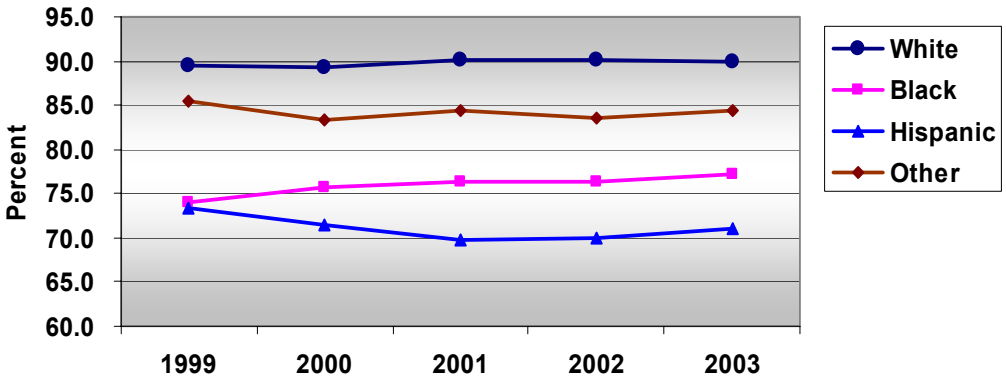
| Race/Ethnicity | First | % | Second | % | Third | % | No Care | % | Unknown | % |
|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **85,259** | **84.8** | **11,293** | **11.2** | **2,888** | **2.9** | **916** | **0.9** | **205** | **0.2** |
| Black | 16,767 | 77.2 | 3,676 | 16.9 | 839 | 3.9 | 422 | 1.9 | 23 | 0.1 |
| White | 61,144 | 87.8 | 6,362 | 9.1 | 1,586 | 2.3 | 395 | 0.6 | 162 | 0.2 |
| Other Minority | 11,364 | 78.2 | 2,212 | 15.2 | 799 | 5.5 | 130 | 0.9 | 20 | 0.1 |
| Hispanic | 7,364 | 71.1 | 2,182 | 21.1 | 622 | 6.0 | 180 | 1.7 | 14 | 0.1 |

**Source: Virginia Department of Health, Center for Health Statistics**

There are numerous reasons for late or no prenatal care. Some of the issues identified in the *VDH's Office of Family Health Services Maternal and Child Qualitative Health Needs Assessment* completed in June 2005 includes: lack of insurance or a payment source for care, limited or no access to transportation, lack of providers in rural areas, mental health or substance abuse problems, lack of knowledge of the importance of prenatal care (sometimes cultural) or how to enter the health system, being non-English speaking, and/or being a teenager. Figure 6 shows that Hispanics of all races received early care least frequently (71.1% in 2003), declining from 72.5% in 1998. The percentage of Hispanic mothers receiving no care has increased from 1.2% in 1998 to 1.7% in 2003. Later prenatal care utilization by Hispanic women reflects racial and ethnic disparities which are often magnified for undocumented immigrants who may fear contact with medical or government systems, often encounter language barriers, and are generally not eligible for Medicaid for prenatal care, even though the birth is covered by emergency Medicaid eligibility. While efforts have begun over the last couple of years to meet

the needs of pregnant Hispanic women, the 2003 statistics would not reflect the effect of these, if any, and/or the growth in this population segment is outpacing the available resources.

**Figure 6. Percent of Live Births with 1st Trimester Prenatal Care by Race and Hispanic Origin, Virginia, 1999-2003**




**Source: Virginia Department of Health, Center for Health Statistics**

Black mothers also have continued to demonstrate lower rates of early care, when compared to white mothers, but the gap has narrowed, partially due to improvements in the percentage of blacks receiving early care and partially due to a slight decline in the percentage of white women receiving early care. The percentage of black mothers obtaining early care grew to 77.2% in 2003 from 74.0% in 1998 while the percentages for white women decreased from 88.7% in 1998 to 87.8% in 2003. Black mothers receiving no care decreased from 2.3% in 1998 to 1.9% in 2003. While most low-income black women in Virginia would be eligible for Medicaid, the *Qualitative Needs Assessment* (OFHS, 2005) points to problems related to access to care for lower income populations, the cultural acceptability of available care, the availability of providers, mental health and substance abuse issues, and, specifically, black women's lifestyles that often allow little time for and/or do not emphasize personal health.

Of the 8,914 births in 2003 to females age 10-19 years, 71.0% began care in the first trimester, 22.5% began care in the second trimester, 4.6% began care in the third trimester, and 1.7% received no care. While teenagers begin care later than pregnant women overall, often due to not knowing they are pregnant and/or not knowing how to access or seek care, teens are entering care earlier in Virginia than five years ago. Teens in Planning Districts 22 (Eastern Shore), 13 (Southside), 8 (Northern Virginia), and 17 (Northeastern area) were least likely to

receive early care. As seen in Figure 7, these planning districts are scattered among the eastern half of the State.

**Figure 7. Virginia's Planning Districts**

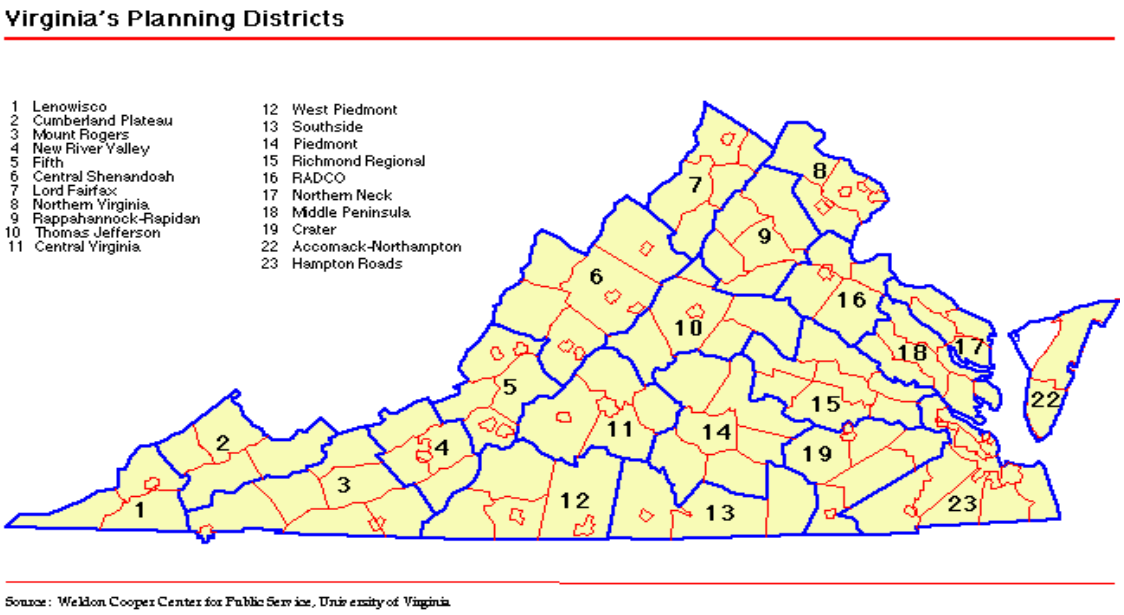
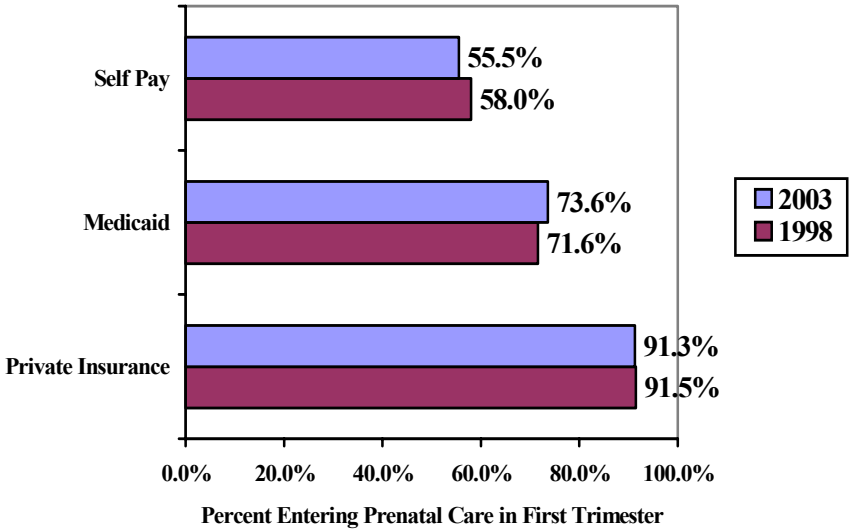



Figure 8 shows a steady improvement in the percentage of Medicaid patients entering care in the first trimester in the past five years, growing to approximately 74% in 2003, while approximately 91% of those with private insurance continued to receive care in the first trimester. Of concern is the decline in the percentage of uninsured women who receive care in the first trimester, declining to approximately 55% in 2003. This decline is influenced by the growing number of Hispanic pregnancies who often don't have access to Medicaid or private insurance, as well as the declining number of obstetrical providers and hospital services in rural areas where many women and/or their spouses have lower access to jobs that provide health insurance.

**Figure 8. First Trimester Prenatal Care Utilization by Payment Source, Virginia, 1998 and 2003**




**Source: Virginia Department of Health, Center for Health Statistics**

The majority (64.3%) of births had 10-14 prenatal visits in 2003 while 18.1% had 1-9 prenatal visits and 15.4% had 15 or more visits. The result is that fewer mothers had 10 or more prenatal visits in 2003 (79.7%) than in 1999 (82.7%) but the same percentage had no prenatal care (0.9%). All racial groups and those of Hispanic origin experienced a decline in the percentage of mothers having 10 or more prenatal visits, resulting in increases in the percentage having 1-9 visits. This is likely related to provider shortages and financial resource issues identified by both the *Maternal and Child Qualitative Needs Assessment* and the *Governor's Work Group on Rural Obstetrical Care*. Planning districts (see Figure 7) which had a particularly high percentage of residential births with nine or fewer prenatal visits in 2003 include: P.D. 8 (21.7%), P.D. 10 (22.9%), P.D. 12 (24.5%), P.D. 15 (24.1%), P.D. 17 (28.0%), P.D. 19 (21.8%), and P.D. 22 (36.5%). Planning districts 17 and 22, which had the highest percentage of births with fewer prenatal visits, are largely rural.

The *Report of Virginia's Governor's Work Group on Rural Obstetrical Care (October 29, 2004)* found that that the average number of prenatal visits was nine or above, with the majority averaging 11 or more visits, in all cities and counties in Virginia, based on birth certificate date from 2000-2003. However, using the Kotelchuck Index as an indicator of the adequacy of utilization of prenatal care, the report identified 61 localities (or approximately 35% of Virginia's 175 counties and cities), which experienced an increase in the proportion of women

receiving inadequate care between 2000 and 2003. It was noted that many of these were in regions that were losing providers and OB service facilities.

Table 7 shows that, after dropping from 8.2% in 1998 to 7.8% in 1999, the proportion of low weight births crept back up over the past five years to 8.2% in 2003. Contributing to low weight births, multiple births continued to increase rising to 3,504 (3.5% of all births) in 2003, compared to 3.1% in 1998. Over half (58.5%) of multiples had low birth weights and plural births accounted for 42.3% of low weight births, a 75% increase since 1998**.** Multiple births have significantly increased with the availability of assisted reproductive technology. As a consequence, low birth weight infants represent 10% or more of mother's ages 40 and older and almost 19% of all births to women age 44 years and older resulted in a multiple birth. On the other end of the spectrum, 10% or more of teenage mothers had low birth weight infants.

Racial disparities persisted as the black low birth weight rate (13.2%) was nearly double that seen in whites (6.9%) in 1998. While Hispanics had low entry into first trimester care, their low weight birth percentage (6.3%) was lower than all other demographic groups. Non-black/white/Hispanic women had a higher percentage of low weight births (7.7%) than white and Hispanic women. Understanding the reasons behind these differences among minority groups themselves will enable efforts to reduce racial and ethnic disparities from whites. Differences may be related to informal community health systems and practices, which vary by culture. The roles of poverty, education, intergenerational factors, degree of acculturation, and level of alienation present areas of study to help explore these differences. As recent immigrant families produce second generations, health status indicators will need to be closely studied to help differentiate factors from country of origin versus environmental ones.

**Table 7. Percentage of Low Birth Weight Births by Race/Ethnicity, Virginia, 1999-2003**

| | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|
| White, Non-Hispanic | 6.5 | 6.6 | 6.6 | 6.5 | 6.9 |
| Black, Non-Hispanic | 12.2 | 12.7 | 12.7 | 12.7 | 13.2 |
| Hispanic, Any Race | 5.8 | 6.3 | 5.8 | 6.2 | 6.3 |
| Other/Unknown, Non-Hispanic | 6.9 | 7.7 | 7.1 | 7.9 | 7.7 |
| Total | 7.8 | 8.0 | 7.9 | 8.0 | 8.2 |

**Source: Virginia Department of Health, Center for Health Statistics.**

Health districts in the State (see Figure 5) with 10% or more of their live births being of low birth weight include, in descending order: Richmond City (13.3%), Portsmouth (11.7%), Crater (11.2%), Norfolk City (10.9%), Piedmont (10.6%), Southside (10.5%), and Cumberland Plateau and Hampton (both with 10.1%). With the exception of the Cumberland Plateau district, which is in far southwest Virginia and has a high level of poverty among its largely white population, these districts have relatively large black populations. There is an obvious need to educate black women statewide, but particularly in these areas, regarding the need for early prenatal care and how to access resources while ensuring the availability of appropriate and accessible prenatal care.

For the five year period from 1999-2003, there were 388 birth defects identified on the birth certificates filed with the VDH's Center for Health Statistics. Of these, 66.8% were seen in white, non-Hispanic infants, 20.1% in black infants, and 8.2% in Hispanic infants of any race. The most commonly reported anomalies were musculoskeletal/integumental anomalies (39), club foot (32), other circulatory/respiratory anomalies (27), digit malformations or misnumbers (26), down syndrome (26), and cleft lip/palate (25). It is important to note that many internal birth defects, such as those of the heart, are not detected until after the birth certificate has been submitted or the child has left the hospital.

According to 1997-2000 data from *Birth Defects Research (Part A): Clinical and Molecular Teratology 70:677-771 (2004)*, the greatest number of birth defects in Virginia were heart defects (including atrial septal defect with a rate of 27.77 per 10,000 live births and ventricular septal defect with a rate of 23.48), patent ductus arteriosus (49.38), hypospadias and epispadias (11.96), congenital hip dislocation (9.59) and Down syndrome (8.58). The rate for Down syndrome among mothers 35 and older was five times the rate for mothers less than 35

years of age (26.60 versus 5.43). Note that patent ductus arteriosus, which is present when the tubular blood channel that allows the blood to bypass the lungs while the baby is in the womb doesn't close (as expected) after birth, often corrects itself within several months of birth, but may require infusion of chemicals, the placement of "plugs" via catheters, or surgical closure.

After dropping to a low of 6.2 per 1000 live births and natural fetal deaths, Virginia's perinatal mortality rate, which measures the number of fetal and infant deaths <7 days, increased to 7.0 (or 708 total deaths) per 1000 live births and natural fetal deaths in 2003. As shown in Table 8, these changes cannot be attributed to any racial group or being of Hispanic origin, although the steady increase in the Hispanic perinatal mortality rate did influence the increase. Given that the majority of the State's births, as well as these deaths, occurred among white women, the increase of 24 deaths among white women from 1999 to 2003 had a significant impact on the higher rates in 2002 and 2003. Nevertheless, while perinatal mortality among black pregnancies has decreased, the disproportionately high rate among this group continues to be of concern.

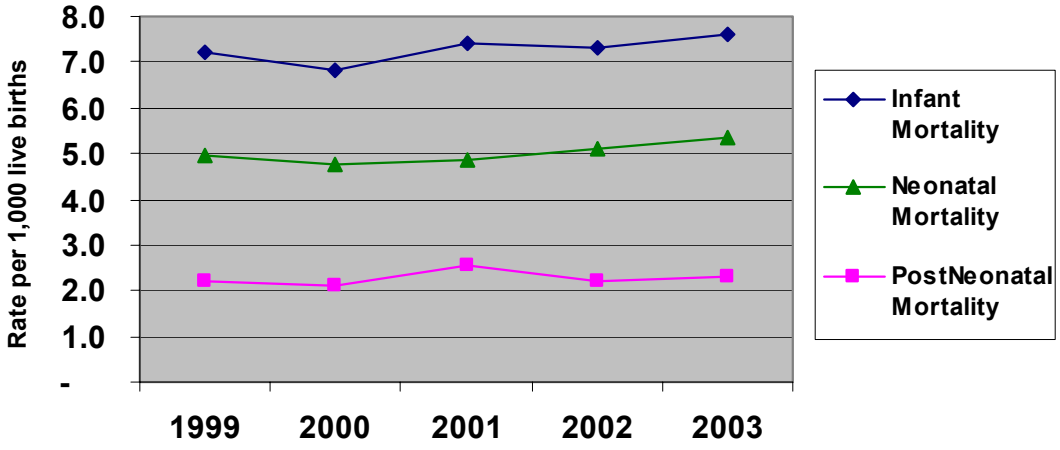
**Table 8. Perinatal Mortality Rate per 1,000 Live Births Plus Fetal Deaths by Race/Ethnicity, Virginia, 1999-2003**

| | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|
| White, Non-Hispanic | 5.2 | 4.8 | 4.4 | 5.4 | 5.6 |
| Black, Non-Hispanic | 12.2 | 10.0 | 12.1 | 11.9 | 11.5 |
| Hispanic, Any Race | 4.1 | 4.5 | 4.7 | 5.9 | 5.6 |
| Other/Unknown, Non-Hispanic | 7.3 | 7.9 | 5.3 | 5.2 | 7.6 |
| Total | 6.8 | 6.2 | 6.2 | 6.9 | 7.0 |

**Source: Virginia Department of Health, Center for Health Statistics.**

After hitting a low of 6.9 deaths to infants under one year per 1,000 live births in 2000, the infant mortality rate increased to 7.6, or 766 deaths in 2003 (see Figure 9). A similar trend occurred relative to neonatal mortality (infant deaths at less than 28 days) while the postneonatal mortality (infant deaths at 28 days or more) rate increased only slightly. Seventy percent of infant deaths occurred under 28 days following birth in 2003, down from approximately 74% in 1998, suggesting that a relatively greater percentage of infants survive after birth. Overall, this data suggests that particular attention needs to be paid to prenatal care, particularly for black women since there are significant racial differences relative to infant mortality.

**Figure 9. Infant, Neonatal, and Postneonatal Mortality, Virginia 1999-2003**




**Source: Virginia Department of Health, Center for Health Statistics**

Large racial disparities remained evident with blacks having an infant mortality rate (13.8) more than two times that of whites (6.0) in 2003. Almost forty percent (38.9%) of the 766 infant deaths in 2003 were black infants, compared to black infants representing only 21.5% of all live births. As shown in Figure 10, there is relatively little difference between the rate for Hispanics and white, non-Hispanic women. Because the number of infant deaths is relatively small compared to the number of live births, rates can fluctuate significantly from year to year due to differences in the outcomes of a dozen or fewer births. The health districts (see Figure 5) with the highest infant mortality rates (average for 1999-2003) were Richmond City (15.1), Roanoke City (12.4), Portsmouth (12.2), Norfolk City (11.6), and Piedmont (11.4). These areas all have relatively high minority populations and, with the exception of Piedmont, are all urban areas.

**Figure 10. Infant Mortality Rate by Race/Ethnicity per 1,000 Live Births, Virginia 1999-2003**

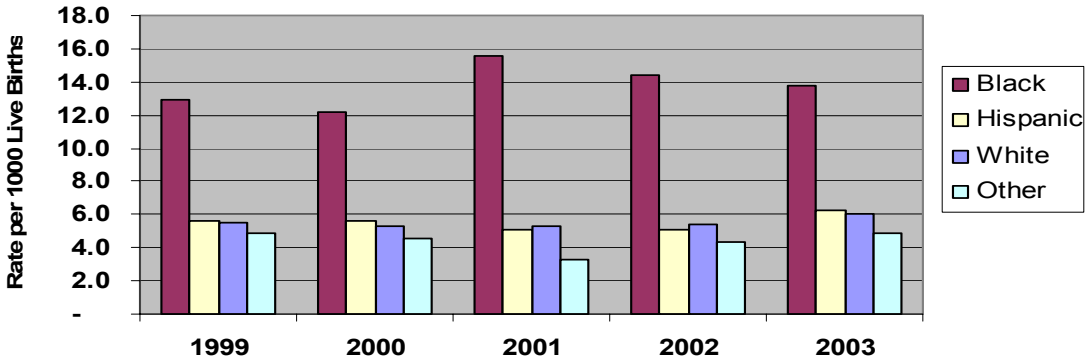



Table 9 shows that while white and other, non-Hispanic infants had the lowest neonatal mortality rate, Hispanic infants had the largest increase (increasing by more than a third). Almost forty percent (38.0%) of the 536 neonatal deaths in 2003 were black infants, more than one and a half times their representation (21.5%) of all live births. While black infants continued to have the highest neonatal mortality rate, it appears to have remained fairly stable.

**Table 9. Neonatal Mortality Rate per 1,000 Live Births by Race/Ethnicity, Virginia, 1999-2003**

| | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|
| White, Non-Hispanic | 3.7 | 3.7 | 3.3 | 3.6 | 4.1 |
| Black, Non-Hispanic | 9.5 | 8.3 | 10.6 | 10.6 | 9.4 |
| Hispanic, Any Race | 3.4 | 4.2 | 3.6 | 4.0 | 4.8 |
| Other/Unknown, Non-Hispanic | 3.5 | 3.6 | 1.9 | 2.7 | 3.8 |
| Total | 5.0 | 4.7 | 4.8 | 5.1 | 5.3 |

**Source: Virginia Department of Health, Center for Health Statistics.**

Significantly different from the neonatal mortality trend, there has been an increase in the black postneonatal mortality rate and a decrease in the Hispanic rate, while the white rate has stabilized. Black infants represented 40.9% of all postneonatal deaths (see Table 10).

**Table 10. Postneonatal Mortality Rate per 1,000 Live Births by Race/Ethnicity, VA, 1999-2003**

| | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|
| White, Non-Hispanic | 1.9 | 1.6 | 2.0 | 1.9 | 1.9 |
| Black, Non-Hispanic | 3.4 | 3.9 | 5.0 | 3.8 | 4.3 |
| Hispanic, Any Race | 2.3 | 1.4 | 1.4 | 1.1 | 1.4 |
| Other/Unknown, Non-Hispanic | 1.4 | 1.0 | 1.3 | 1.7 | 1.0 |
| Total | 2.2 | 2.1 | 2.6 | 2.2 | 2.3 |

**Source: Virginia Department of Health, Center for Health Statistics**

According to the National Center for Health Statistics, there were a total of 2,170 infant deaths from 2000 through 2002, or an average of 723 deaths annually. The leading cause of infant death from 2000-2002 was disorders related to short gestation (n = 407; average=136), which exceeded deaths from congenital anomalies (n = 369; average=123) by an average of thirteen cases annually. Deaths due to short gestation represented approximately 19% of all deaths while those related to congenital anomalies represented 17% of all infant deaths. While congenital anomalies was the leading cause of death for white infants (22.4% of all white infant deaths) and Hispanic infants (19.4%), short gestation was the leading cause of death for black infants (26.1%) with congenital anomalies being far behind at 9.7%. Short gestation was the cause of 12.9% of white, non-Hispanic deaths and 15.1% of Hispanic infant deaths.

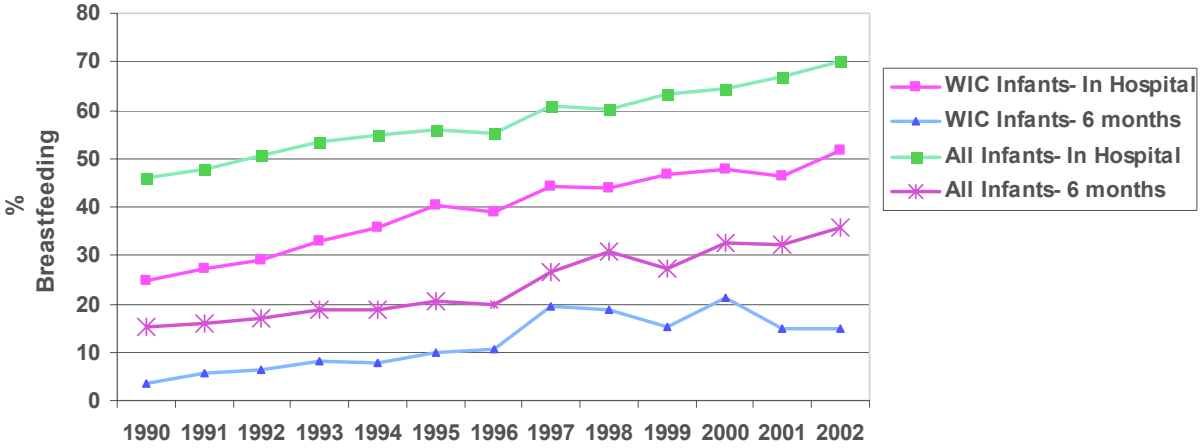
Sudden Infant Death Syndrome (SIDS) was the third leading cause of all infant deaths and the top cause of all postneonatal infant deaths. However, for Hispanic infants, SIDS was tied with maternity pregnancy complications as the third leading cause of death. The NCHS reports that 212 infants died of SIDS between 2000 and 2002, or an annual average of 71 infants, causing 9.8% of all infant deaths. SIDS was the cause of 10.6% of all white, non-Hispanic infant deaths but only 7.2% of Hispanic infant deaths.

As reported by VDH's Center for Health Statistics, in 2003, 71 infants died of SIDS (70.6 deaths per 100,000 live births). The majority (90.1 percent) of SIDS deaths occurred at less than one month of age. Rates have fluctuated widely because of the relatively small number of SIDS deaths relative to the number of live births (growing from 57 deaths in 1999 to 76 in 2001 and then down to 71 deaths in 2003). Nevertheless, the SIDS mortality rate for black infants has been consistently one and a half to over three times higher than white infants.

Between 1999-2003, there were 39 pregnancy-associated deaths in Virginia, or an average of 8 deaths annually. The 1999-2000 maternal mortality rate was 10.1 deaths per 100,000 live births, but fell to 6.4 deaths per 100,000 live births in the 2001-2003 period. Given the relatively small number of maternal deaths, it is difficult to draw any statistical conclusions.

Breastfeeding of infants generally contributes to improved nutritional and overall health of an infant but also can provide an important vehicle for mother and infant bonding. As illustrated in Figure 11, data from *Ross Laboratories* shows that in 2002 in Virginia, more than two-thirds (70%) of all infants were breastfed in the hospital, while approximately a third (35.8%) of all infants were still being breastfed six months after discharge. While still below the desired level, more than half (51.8%) of all infants receiving WIC were breastfed in the hospital in 2002 and 15% were breastfed at six months after discharge. Nevertheless, the 2002 percentage represented a significant drop from 2000 when approximately 21% of WIC infants were still being breastfed. Virginia compares similarly to national figures relative to all mothers breastfeeding, but lags behind national levels (by approximately seven percentage points) on the percent of WIC mothers breastfeeding in both the hospital and at six months.

**Figure 11. Percentage of Virginia Mothers Breastfeeding, 1990-2002**




According to VDH's Division of WIC and Community Nutrition Services, in 2003, 34,969 women were enrolled in WIC. This represents approximately 68% of those estimated to be eligible for WIC (51,244 women). The largest numbers of women enrolled in WIC are white, non-Hispanic (14,248 or 40.7% of total enrollees), followed closely by black, non-Hispanic women (12,849 or 36.7%). Hispanic women represented 18.3% of enrollees, while women of other races represented 2.9% of enrollees and the race/ethnicity of 1.3% were unknown.

The number of infants enrolled in WIC (36,612 infants) is approximately 5% higher than the number of women enrolled and exceeds the estimate of infants eligible for WIC by 5%. Obviously, this estimate is too low and does not appear to be related to any particular geographic area or locality type since all but nine health districts have more infants enrolled than those estimated to be eligible. Data show 14,833 black, non-Hispanic infants are enrolled in WIC, representing 40.5% of all infants enrolled. White, non-Hispanic infants represent 38.6% of infants enrolled, while Hispanic infants represent 15.8% of those enrolled. Almost 3% of infants enrolled were of other races and the race of 2.2% of infants enrolled were unknown.

The largest numbers of both women and infant WIC enrollees are in higher population health districts (see Figure 5) such as Fairfax, Norfolk, Virginia Beach, Peninsula, Prince William, and Richmond City. Health districts with the lowest percentage of potential women eligibles being served include: New River, Norfolk, Richmond City, Alexandria, and Virginia Beach (all with 40% or more of potential eligibles being unserved).

OFHS conducted an online needs assessment survey of both individual and organizational representatives to assess the health status, risk factors, and the availability and accessibility of quality services for the Maternal and Child Health population, completed in May of 2005. The major health issues for women that were identified include: obesity (lack of exercise and poor nutrition), health insurance coverage, depression and mental illness, domestic violence, and prenatal care. Many of these same issues, in addition to dental care, were identified by the Governor's Work Group in its October 29, 2004 report, as well as Virginia's *Maternal and Child Qualitative Health Needs Assessment* (June 2005). The Qualitative Needs Assessment identified needs relative to:

- access to care (adequate number of providers; financial and geographic access; coordination and/or case management),
- cost of health care (need for increased reimbursement of and eligibility for Medicaid and FAMIS for dental and health care; access to lower cost care),
- vulnerable populations (low-income, minority; non-English speaking; those with mental health or substance abuse problems; those with limited transportation),
- prevention and early intervention (adequate and timely prenatal care, early behavioral health and dental treatment, and increasing case management), and

- coordination, communication, and community-based collaboration (between State and local health departments, community-based organizations and providers; communication of available resources and increasing health education).

Promoting healthy behaviors and lifestyles, while reducing risky ones, among younger women continues to be an increased focus for the Virginia Department of Health (VDH) not only due to their impact on any children born but also because of the long-term impact on a woman's health status.

Like the nation as a whole, an increasing percentage of women in Virginia are identified as being overweight or obese. In 1990, 22.0% of Virginia's women were identified by BRFSS data as being overweight (body mass index 25-29.9) and another 10.7% were identified as being obese (BMI 30 or greater), lower than national rates for women of 24.4% and 11.5%, respectively. These percentages grew to 29.3% of Virginia women being overweight and 22.5% being obese in 2002. Not only does the percentage of overweight women in Virginia now equal the percentage nationally (29.5%), but also the percentage that are obese now exceeds the national percentage (21.4%). The result is that the number of women who are overweight or obese in Virginia has grown from one in three to more than one in two women.

Both the level of physical activity and dietary habits can impact weight. BRFSS data reports that almost 69% of all Virginia women did not eat enough fruits and vegetables (5 or more servings daily) in 2002, a level that has stayed relatively stable over the last eight years and is approximately three percentage points higher than the national percentage of 72%. When women in Virginia were asked by the BRFSS survey if they participated in any physical activities in the past month, approximately 24% said "no" in 2004, an improvement over the approximately 28% that said "no" in 2002, the same percentage that said that they had no leisure time physical activity. Of course, BRFSS data are self-reported and are subject to individual interpretation and honest disclosure of personal information.

Mental health issues are a growing concern that, without appropriate treatment, can have negative effects for women throughout their lives. As stated previously, mental health discharges represented more than 13,000 discharges among females ages 15-44 years, or more than 7% of all inpatient discharges of women in this age group. Existing state databases, however, do not adequately capture outpatient diagnoses and treatment information. However, research suggests that the incidence of perinatal depression may be widespread. Some estimates indicate that 10 to

15 percent of new mothers experience postpartum depression. It may be even higher among minorities, those with low income, and women under significant stress. A 2004 survey of Healthy Start participants in four Virginia communities revealed that 28 percent of the women screened suffered from depression. Another study in two of these Healthy Start sites in 2002-03 revealed that 59% of those screened in the Norfolk program and 51% of the women in Richmond project experienced symptoms of depression.

According to the NCHS, from 2000-2002, 276 suicides occurred among females 15-44 years, or an annual average of 92 suicides. The vast majority (85%) of these suicides were among white females, while only 8% of suicides were among black females.

Substance abuse among women, particularly pregnant women, is difficult to adequately assess since the mother gives this information voluntarily. In 2003, of the 100,561 total live births, 7,446 (7.4%) mothers reported tobacco use, 595 (0.6%) reported drug use, and 453 (0.5%) reported alcohol use, according to data from VDH's Center for Health Statistics. White, non-Hispanic women represented 64% of all those who reported the use of alcohol and 51% of those who report illicit drug use during pregnancy, while black, non-Hispanic women represented 27% of those reporting alcohol use and 46% of those reporting drug use.

BRFSS data estimates that 20.8% of all women in Virginia were current smokers in 2002, climbing from a recent low of 18.8% in 2000 but lower than 2001 and based on a larger sample size than either of these years. The 2002 Virginia percentage matches the national percentage of women who smoke, but the 2002 national percentage represents a decrease from the 2000 level. Of those that reported tobacco use during pregnancy, the percentage for white, non-Hispanic women (9.4%) exceeded all other groups, but represented a 15% decrease from 1999 to 2003. While the rate for black women did not decline from 1999 to 2003, black pregnant women's rate remained at 7%. A 38% decline in tobacco use was found among other racial groups and Hispanic pregnant women during the same period. Health districts (see Figure 5) with the

greatest percentage of pregnant mothers reporting tobacco use includes: Cumberland Plateau, Lenowisco, Mount Rogers, Piedmont, and Southside. Most of these areas are rural and/or have a tobacco growing history.

**Table 11. Percentage of Women Reporting Tobacco Use During Pregnancy by Race/ Ethnicity, Virginia, 1999-2003**

| | 1999 | 2000 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|
| White, Non-Hispanic | 11.1 | 10.3 | 10.0 | 9.5 | 9.4 |
| Black, Non-Hispanic | 7.0 | 6.4 | 6.9 | 6.3 | 7.0 |
| Hispanic, Any Race | 1.3 | 1.0 | 1.0 | 0.9 | 0.8 |
| Other/Unknown, Non-Hispanic | 1.8 | 1.4 | 1.2 | 1.4 | 1.1 |
| Total | 9.0 | 8.2 | 7.9 | 7.4 | 7.4 |

**Source: Virginia Department of Health, Center for Health Statistics.**

There are variances between the number of mothers who report substance use during pregnancy and the number of substance exposed infant births reported by physicians because substance use information is requested from the mother at the time of the birth certificate application by persons not necessarily trained to inquire or assess substance use in pregnancy. The mother may have used a substance at any time during the pregnancy, but if the substance was not recent, it may not be reported. Therefore, caution should be taken when drawing conclusions or making recommendations based on the birth certificate information.

The *1999 National Household Survey on Drug Abuse* estimated that nationally, 7.6% of pregnant women used an illicit drug during their pregnancy and 12.9% drank alcohol. Of those pregnant women who drank, 3.3% binged on alcohol and 0.2% drank heavily. While the actual numbers will vary depending upon the population, it is anticipated that rates of maternal substance use should be similar across communities and therefore, Virginia would report similar statistics which would be higher than what is reported on birth certificates. It has been identified that obstetrical providers are not screening pregnant women for substance use in pregnancy. In a *2004 VDH and MHMRSAS Survey of Perinatal Providers on Screening Practices for HIV and Substance Use*, only 35 percent (n=581) of providers indicated they screened their pregnant patients for substance use (VDH and MHMRSAS, 2004). Lack of knowledge of the law and lack of recognition of the need to screen were cited as reasons. In communities that have few or

no reports of substance-exposed infants, it is suspected that prenatal care providers do not recognize or are reluctant to address maternal substance use.

Research indicates that alcohol and tobacco have the most harmful effects on the developing fetus including growth deficiencies, increased risk of Sudden Infant Death Syndrome, and alcohol-related, neurodevelopmental deficits including mental retardation and childhood hyperactivity (*Britt, Ingersoll, Scnoll, 1999*).

Section 32.1-127 of the *Code of Virginia* requires hospitals to notify the local Community Services Boards (CSBs) of any substance-using, postpartum women. The Virginia Department of MHMRSAS provides funding to 40 CSBs that are responsible for providing substance abuse emergency services, prevention and outpatient treatment services. In a survey done of the CSBs during the period July 1, 2000 to March 31, 2001, there were 278 women referred by hospitals for substance use in pregnancy. Cocaine was the most frequently reported substance used (114 mothers), followed by opiates (28 mothers), marijuana (95), and alcohol (8 mothers). Another 65 women referred were using unknown drugs or test results were unavailable.

In FY 03 (July 1, 2002 – June 30, 2003), there were 483 substance-exposed infants reported to the CSBs and 293 received case management services payments. Women referred under the *Code of Virginia* are not required to follow through with services at the CSBs even though the CSBs have been encouraged to provide outreach services and can receive a one time outreach case management fee for each hospital referred case they serve.

Alcohol is metabolized and excreted within hours and is difficult to detect through drug testing unless the woman drank within several hours of delivery or consumed significant amounts of alcohol. Forty-three mothers tested positive for multiple substances. *(House Document No. 6, 2002)* Fetal Alcohol Syndrome (FAS) is a birth defect caused by alcohol consumption during pregnancy. In Virginia, between July 1999 through June 2004, there were 34 babies born with FAS. (*VaCARES, 2004*) Other babies may not have the obvious physical symptoms but have Alcohol Related Neurodevelopmental Disorders (ARND), which includes significant mental retardation, learning and behavioral difficulties and are frequently not diagnosed until school age or later. These babies are not captured in *VaCARES*.

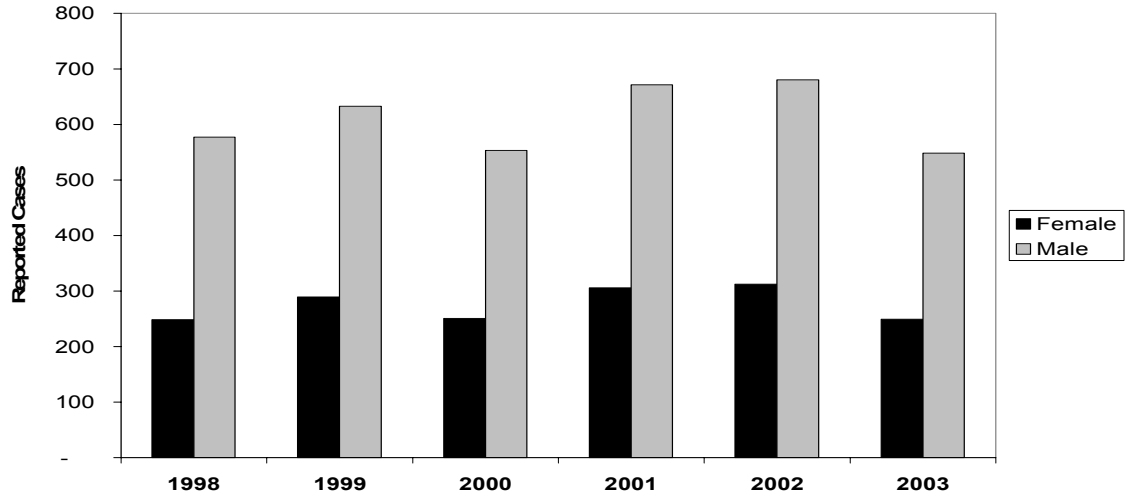
Section 63.1-248.3 of the *Code of Virginia* requires an attending physician to file a report with the local department of social services whenever a newborn infant evidences exposure to non-prescription, controlled substances or signs of fetal alcohol syndrome. From July 1, 2000

through June 15, 2001, local departments received 306 reports from medical personnel alleging that an infant had in-utero exposure to an illicit substance or alcohol. Two hundred fifty-six of these reports met the legal definition of substance-exposed newborns and were investigated by local departments. The Department randomly selected 50 of the 306 reports to review and found that cocaine was the most commonly used drug. The report also noted these mothers were long-term drug users, had a history of involvement with child protective services programs, and had other children placed with relatives. In addition, these infants were often born premature and had low birth weights. (*House Document No. 6*) During July 1, 2001 to June 30, 2003, 870 substance-exposed newborns were reported to child protective services.

In general, tobacco, drug, and/or alcohol use in pregnancy can have devastating and lasting consequences for both the woman and her child. From this data and what we know nationally, there are women and their newborns that are not receiving adequate assessment and treatment for substance use in pregnancy.

According to data from the VDH's Division of HIV, STD and Pharmacy Services, newly diagnosed Human Immunodeficiency Virus (HIV) cases (797) decreased almost 20% between 2002 and 2003 to their lowest number ever. Those among females dropped to 249 in 2003 from 312 in 2002, keeping the proportion of all new HIV cases among females essentially the same at 31%. The number of new cases of HIV and the percentage among females in 2003 is similar to that found in 1998 (see Figure 12).

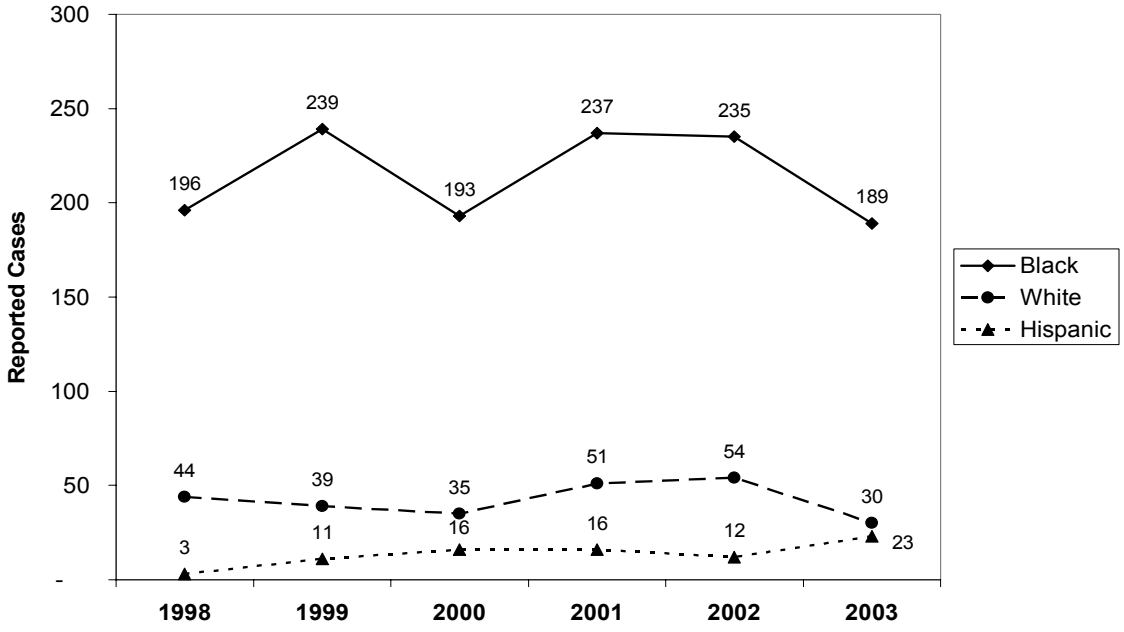
**Figure 12. Virginia HIV Cases by Gender, 1998-2003**




**Source: 2003 HIV/STD Annual Statistics, Virginia Dept. of Health**

Black females represented 75.9% of all these cases in 2003 with the number of diagnosed HIV cases among black and white females hitting their lowest levels since 1998 (see Figure 13). However, the number of HIV cases among Hispanic women increased from 3 to 23 during this period. This may reflect an actual increase in cases and/or increased access to health care services for diagnosis to occur. The Eastern region had the greatest percentage of HIV cases diagnosed in the State (32.5%) in 2003, followed closely by Northern Virginia at 30.2% of all cases, and Richmond with 27.5% of all cases. While urban areas of the State continue to have the highest prevalence of HIV and STDs, many rural areas have much higher than expected rates of these diseases. While the prevalence of most STDs is highest in those 15-24 years, 37.2% of all HIV cases in 2003 were diagnosed in those 30-39 years, followed by 17.9% in those 45+ years.

**Figure 13. Female Virginia HIV Cases by Race/Ethnicity, 1998-2003**



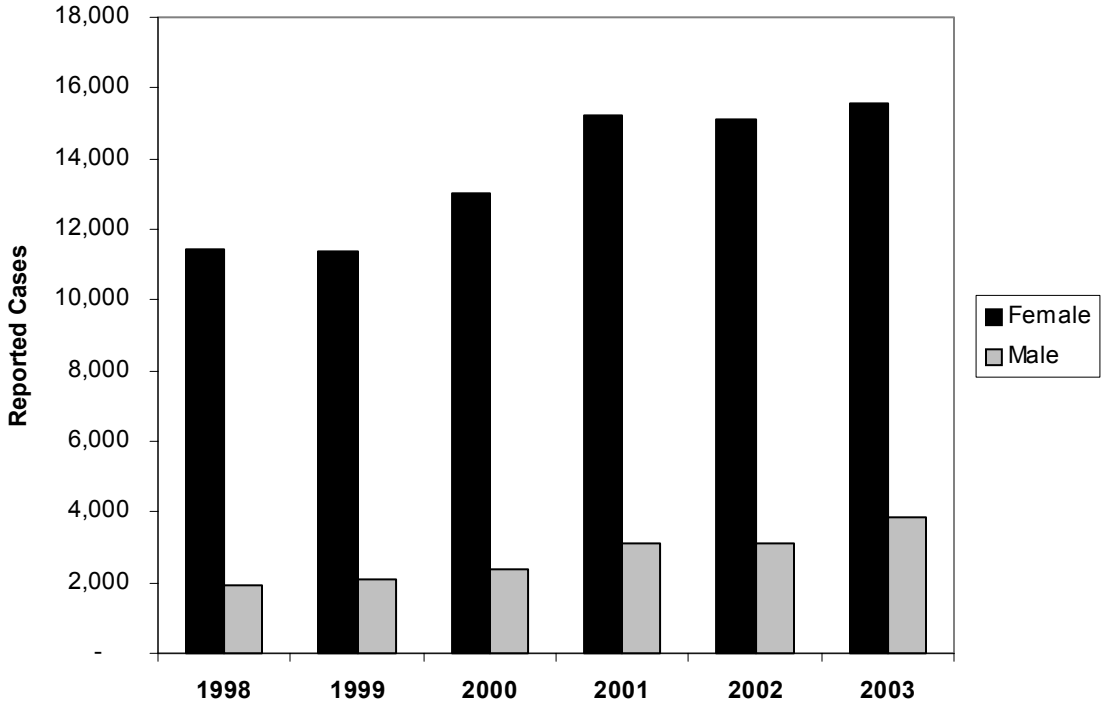

**Source: 2003 HIV/STD Annual Statistics, Virginia Dept. of Health**

Section 54.2403.01 of the *Code of Virginia* requires that HIV testing be offered to all pregnant women. In a 2004 VDH and MHMRSAS Survey of Perinatal Providers on Screening Practices for HIV and Substance Use, only 61% of perinatal providers routinely counseled pregnant patients regarding HIV. The three most common reasons given for not counseling pregnant women was: 1) not needed, 2) referred elsewhere for testing, and 3) lack of time.

The number of AIDS cases in 2003 was 793, of which 225 (or 28.4%) were women. This represents a decrease in total AIDS cases of 8.4% and a 10.0% decrease in AIDS cases among females. As with HIV, incidence of AIDS is greater among older age groups when compared to most other STDs. Those 45+ years represented 31.3% of those diagnosed with AIDS, while another 39.4% of those diagnosed were 30-39 years and 16.6% were 40-44 years of age. The Northern Virginia region had the highest percentage of AIDS cases in 2003 (38.8%), followed by the Central (22.6%) and Eastern (22.2%) regions.

With 19,439 total cases, chlamydia was responsible for more than half of the reportable sexually transmitted diseases in 2003. Moreover, this represents a 45% increase from the number of chlamydia cases diagnosed in 1998 (see Figure 14). Because of Virginia's public health screening criteria, 80% of chlamydia reports were for females in 2003; however, this is the lowest percentage since 1998 for females relative to males.

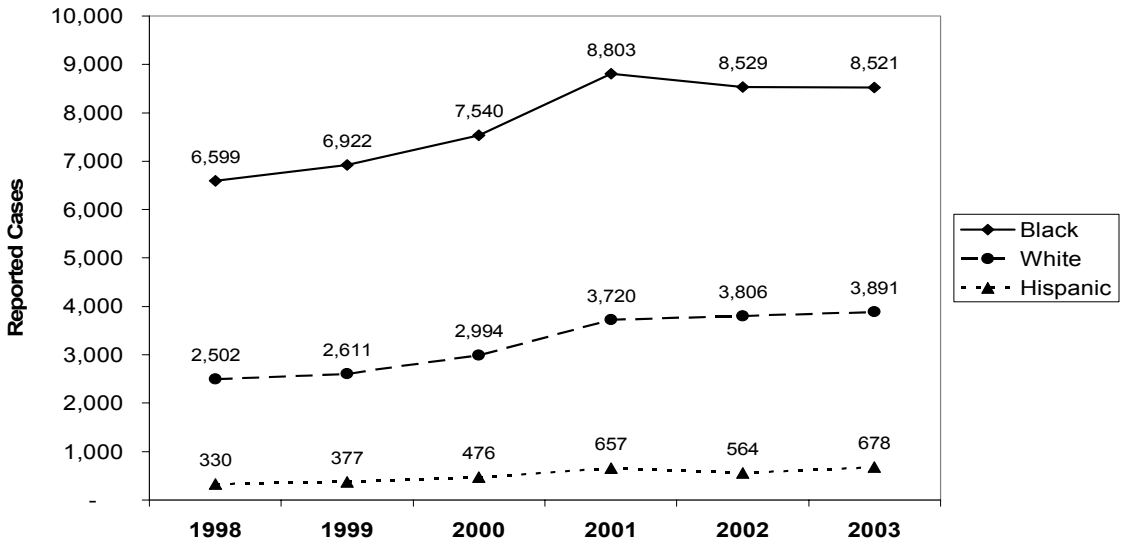
**Figure 14. Virginia Chlamydia Cases by Gender, 1998-2003**




**Source: 2003 HIV/STD Annual Statistics, Virginia Dept. of Health**

As shown in Figure 15, the percentage of chlamydia cases among black women was 120% higher than among white women. While the number of cases among Hispanic women has more than doubled from 1998 to 2003, the increase in cases primarily reflects the increase in the Hispanic population during that period.

**Figure 15. Female Virginia Chlamydia Cases by Race/Ethnicity, 1998-2003**

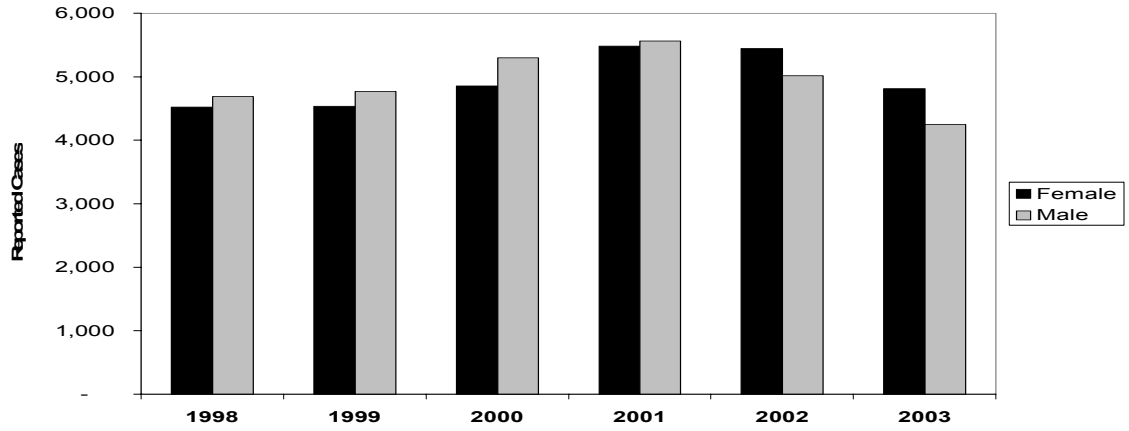



**Source: 2003 HIV/STD Annual Statistics, Virginia Dept. of Health**

More than 75% of chlamydia cases are diagnosed among persons 15-24 years, with almost equal distribution between those 15-19 years (37.2% of cases) and those 20-24 years (38.6%). In 2003, Richmond City had the greatest number of chlamydia cases (2,053), with a five year average of 2,090 between 1999 and 2003, followed by Norfolk with a five year average of 1,219. By region, Eastern Virginia saw 37.4% of all chlamydia cases in 2003 (7,272 cases), followed by Central Virginia with 24.8% of all cases.

In 2003, there were 9,062 total cases of gonorrhea, with more than half being among females (4,812 cases or 53.1%), the highest percentage since 1998 (see Figure 16). However, while the total number of gonorrhea cases fell 1.6% in Virginia between 1998 and 2003, the number of cases among women increased 6.4% during that period. Moreover, over a quarter (27.8%) of those persons infected in 2003 were aged 15-19 and another similar percentage (29.0%) were 20-24 years.

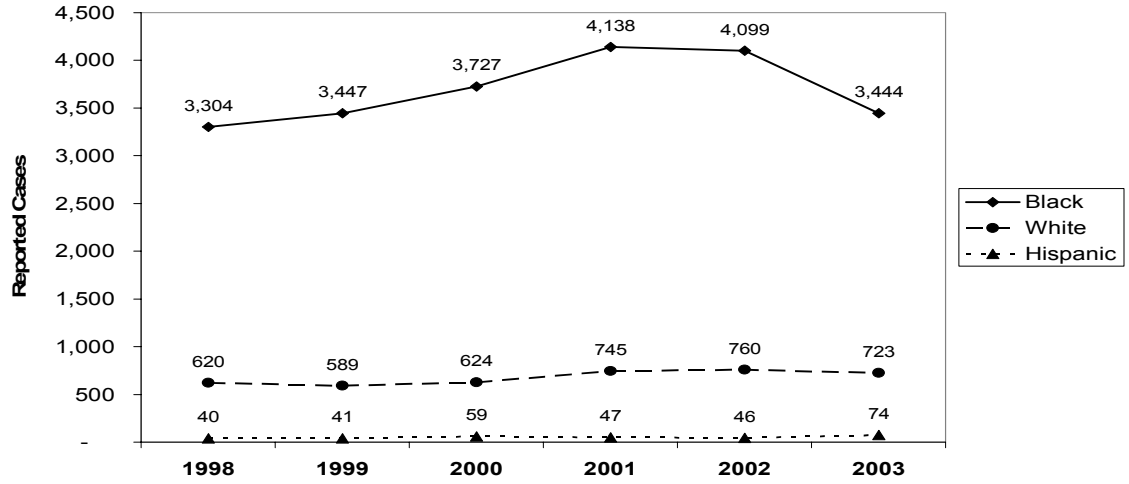
**Figure 16. Virginia Gonorrhea Cases by Gender, 1998-2003**




**Source: 2003 HIV/STD Annual Statistics, Virginia Dept. of Health**

Black women represented 71.6% of all cases of gonorrhea among women in 2003 (see Figure 17). While the number of cases of gonorrhea among black women increased considerably in 2001 and 2002, the 2003 number represented a considerable decrease. The number of cases among Hispanic women increased by 61% from 2002 to 2003. Richmond had the largest number of gonorrhea cases in 2003 (1,249) and the largest five-year average (1,689 per year), followed by Norfolk with 1,061 cases in 2003 and an average of 1,351 over the last five years. The Eastern region saw almost half of all gonorrhea cases (49.4%) statewide in 2003, followed by the Central region with 27.1% of all cases. Both of these percentages are extremely disproportionate to the relative percentage of people living in these regions.

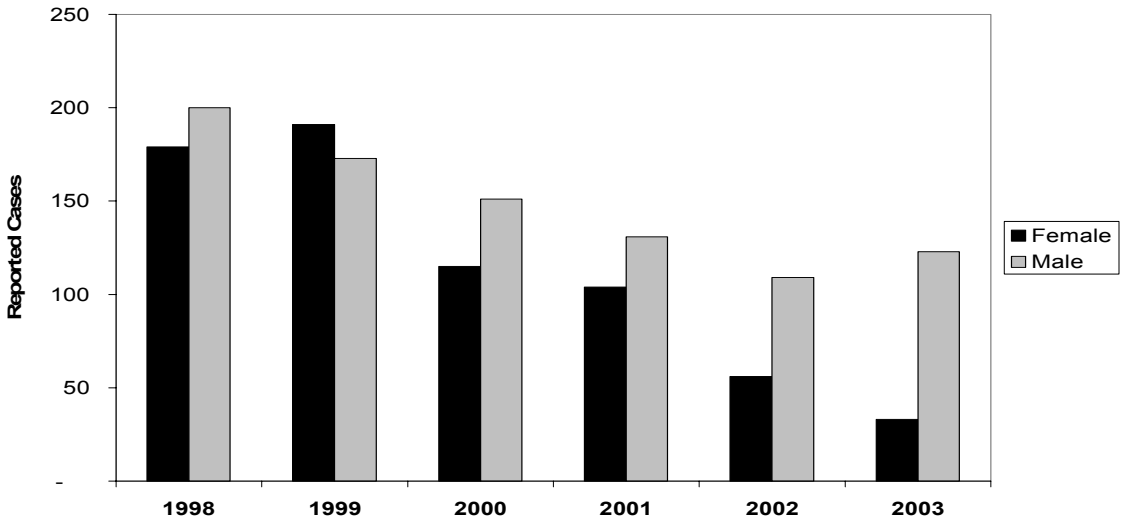
**Figure 17. Female Virginia Gonorrhea Case by Race/Ethnicity, 1998-2003**




**Source: 2003 HIV/STD Annual Statistics, Virginia Dept. of Health**

As shown in Figure 18, the total number of cases of early syphilis in Virginia has dropped by 60% from 1998 to 2003 (from 379 to 156 cases). Moreover, the number of early syphilis cases among females decreased 82% during that same period (from 179 to 33 cases). This had an impact on congenital syphilis cases, which fell from 18 in 1994 to 6 in 2001 (after being only 4 in 2000) to a low of 1 case in both 2002 and 2003. This met the Healthy People 2010 objective of no more than 1 per 100,000 live births.

**Figure 18. Virginia Total Early Syphilis Cases by Gender, 1998-2003**




**Source: 2003 HIV/STD Annual Statistics, Virginia Dept. of Health**

The Virginia State Police reported a total of 4,873 forcible sex offenses in 2004 with 4,468 (91.7%) having a female victim. The majority (61.2%) of these involved females 0-17 years while another 28.5% involved females 18-35 years. White females accounted for 69% of all female victims while black females accounted for another 29%. A quarter (25.4%) of all sex offenses were committed by an "acquaintance," followed by an "otherwise known" person (9.6%), a "stranger" (8.0%), a "parent" (7.6%), and a "friend" (6.4%). In 2004, 1,715 forcible rapes of females were reported to police, equaling one forcible rape every 5 hours (Virginia State Police). The majority (65%) of these rapes involved white women while another 33% involved black women. In 2003, 3,107 sexual assault victims (92% being female) called Virginia's Domestic Violence and Sexual Assault Hotline and 950 sought advocacy services from Virginia sexual assault crisis centers. Advocacy services encompass a wide variety of counseling, support, and accompaniment services provided to victims over a period of time. Sexual assault

continues to be a major crime, which inordinately impacts young women and can have devastating effects on both emotional and physical health for years.

Sexual assaults are likely grossly underreported. According to a survey reported in *Prevalence of Sexual Assault in Virginia (Saba Masho, MD, DrPH, April 2003 rev2, page 16)*, the lifetime prevalence of sexual assault among Virginia residents was 27.6% for females and the majority of female victims were victims of rape. The survey found that the majority of female victims identified their offender as being a relative (28.4%), followed by a friend (22.3%) and then acquaintances (18.2%). A stranger represented only 11.5% of offenders identified by females. Obviously, assaults by relatives or friends represent a larger percentage of the survey's findings when compared to those that report assaults to law enforcement.

Virginia's Domestic Violence and Sexual Assault Hotline of Virginia received 30,645 calls in 2003 related to family violence and 7,046 family violence victims requested advocacy services. In addition, the families sheltered in Virginia included 3,535 adults and 3,205 children (96% of family violence victims are female), with the number of families sheltered increasing by 9% from 2002 to 2003. In addition, 1,569 families were turned away from the shelter because it was full, a 37% increase from 2002 to 2003. Additional community-based resources, education and outreach to both potential victims and perpetrators aimed at deterring sexual assault and family violence will continue to be supported by the VDH in conjunction with Virginians Against Domestic Violence and other appropriate organizations.

Chronic diseases are among the leading causes of death for women and can also diminish the quality of their lives. In Virginia 7.1% of women reported having been told by a doctor that they have or have had diabetes, including those having gestational diabetes (1.2%), according to 2003 BRFSS data. This represents a significant increase from 1999 when 5.4% had been told they had diabetes with 1.6% of those were pregnancy-related. However, these percentages are very similar to national levels in both 1999 and 2003.

In 2003, a study was done to examine the prevalence of diabetic pregnancies between 1989 and 2002. Birth certificate data was used and found that the prevalence of maternal diabetics ranged between 2.3% in 1989 to 3.8% in 2002, representing a significant increase. In addition, these women were also almost twice as likely to have a cesarean delivery as non-diabetic pregnancies. Obviously, this increase in the percent of childbearing women with

diabetes will impact the future prevalence of the disease and impacts the cost of health care currently and into the future.

Less than one quarter of all Virginia adult females (23.8%) had been diagnosed with hypertension in 2003, according to BRFSS data. This is down slightly from 1997 when 25.0% were diagnosed with hypertension and lower than the national 2003 level of 24.9%. Almost one third (32.7%) of Virginia women reported that they have been told by a health care professional that they have high cholesterol, similar to national percentage (32.1%) for women. This represents a significant increase both from a state and national perspective since 1997 when the State percentage was 26.6% and the national percentage was 23.6%. There could be a number of reasons for the increase in both diabetes and cholesterol prevalence including: actual increases in the percentage of women having these conditions due to age and/or lifestyle changes, more screening being performed by health care providers, more access to health care providers by previously underserved populations, and/or a combination of these factors. Fortunately, only 3.1% of women reported in the 2003 BRFSS data ever being told that they've had a heart attack or myocardial infarction, but this needs to be closely monitored to determine if early detection and treatment helps to prevent future heart attacks.

Cancer represents another major chronic disease concern. The overall age-adjusted cancer rate for women in Virginia in 1999 was 374.4 per 100,000 population, the highest rate in the previous five years. Table 12 shows that breast cancer was the most commonly reported site of cancer for women in 1999 (the latest data available from the Virginia Cancer Registry. Cancer of the breast and cervix are the cancers that have a relatively high incidence rate among younger women. The age-specific incidence of breast cancer in 1999 was from approximately 25/100,000 women ages 30-34 to about 140/100,000 among women ages 40-44. The overall age-adjusted incidence rate of breast cancer in Virginia was 134.1, compared to a national rate of 128.6. Moreover, approximately 51% of all breast cancers in Virginia were localized at the time of diagnosis. While the incidence rate of breast cancer among white women in Virginia was 20% higher than among black women (136.3 compared to 120.3), the death rate due to breast cancer was 35% higher among black women than among white women (36.1 compared to 26.7 per 100,000).

In Virginia, the 1999 age-adjusted rate for cancer of the cervix was 9.8 per 100,000 with a rate of 8.2 for white women and 12.0 for black women, lower than the national rates of 9.5

overall, 8.8 among white women, and 13.9 among black women. In-situ cancers represented almost 67% of all cervical cancer in Virginia and are not represented in these rates. The cervical cancer rate for women in Virginia ranges from about 2/100,000 in those ages 20-24 to approximately 12/100,000 among women ages 40-44. Factors that increase the risk of cervical cancer are: early age of first sexual intercourse, having multiple sex partners, human papillomavirus (HPV) infection, and smoking and nutritional deficiencies.

**Table 12. Distribution of Ten Most Commonly Reported Cancer Sites, Females, Virginia, 1999**

| SITE | Cases | % | Rate |
|---|---|---|---|
| Breast | 4,593 | 34.2 | 128.6 |
| Lung/Bronchus | 1,655 | 12.3 | 46.4 |
| Colon/Rectum | 1,565 | 11.7 | 43.4 |
| Corpus and Uterus, NOS | 775 | 5.7 | 21.7 |
| Non-Hodgkin Lymphoma | 476 | 3.5 | 13.3 |
| Ovary | 471 | 3.5 | 13.1 |
| Melanoma of the Skin | 413 | 3.0 | 11.4 |
| Cervix | 358 | 2.6 | 9.8 |
| Urinary Bladder | 295 | 2.2 | 8.2 |
| Thyroid | 293 | 2.1 | 8.1 |

Note: Data exclude localized basal and squamous cell skin cancers and in situ carcinomas except urinary bladder. All rates are per 100,000 population and are adjusted to 2000 U.S. standard population (5 year age-groups).

As shown in table 13, the crude death rates for females 15-44 years of age are relatively low. The major causes of death among females in this age category range from accidents, to various cancers and cerbrovascular diseases, to suicide and homicide. Key differences between white and black women emerge. While white women have a death rate due to motor vehicle accidents two and a half times that of black women, the second leading cause of death for black women is HIV disease and no white women died of HIV. Moreover, the leading cause of death for young black women is breast cancer and their rate is 25% greater than white women's death rate due to breast cancer, which is the second leading cause of death among white women. Finally, the death rate due to "all other forms of heart disease" among black women is almost twice that of white women. An assessment of these deaths would allow a better determination of the causes of these differences, whether environmental, genetic, or due to differences in access to early and/or appropriate health care services.

**Table 13. Top Leading Causes of Death by Race, Females 15-44 Yrs, Virginia, 2000-2002**

| | All Races | | Black | | White | |
|---|---|---|---|---|---|---|
| | Deaths (n) | Percent Deaths | Deaths (n) | Percent Deaths | Deaths (n) | Percent Deaths |
| Motor vehicle accidents | 450 | **11.0** | 83 | **5.9** | 356 | **13.7** |
| Malignant neoplasm of breast | 308 | **7.5** | 121 | **8.6** | 180 | **6.9** |
| All other forms of heart disease | 228 | **5.6** | 110 | **7.8** | 114 | **4.4** |
| Accidental poisoning and exposure to noxious substances | 192 | **4.7** | 34 | **2.4** | 158 | **6.1** |
| Intentional self-harm (suicide) by other and unspecified means and their sequelae | 172 | **4.2** | | | 140 | **5.4** |
| Assault (homicide) by discharge of firearms | 134 | **3.3** | 71 | **5.1** | 62 | **2.4** |
| Human immunodeficiency virus (HIV) disease | 129 | **3.2** | 116 | **8.3** | | |
| Cerebrovascular diseases | 114 | **2.8** | 55 | **3.9** | 57 | **2.2** |
| All other and unspecified malignant neoplasms | 109 | **2.7** | 34 | **2.4** | 74 | **2.9** |
| Intentional self-harm (suicide) by discharge of firearms | 104 | **2.5** | 23 | **1.6** | 95 | **3.7** |
| Malignant neoplasms of trachea, bronchus and lung | 85 | **2.1** | | | 66 | **2.5** |
| Diabetes mellitus | 81 | **2.0** | 29 | **2.1** | 52 | **2** |
| Septicemia | 79 | **1.9** | 41 | **2.9** | 37 | **1.4** |
| All other forms of chronic ischemic heart disease | 79 | **1.9** | 26 | **1.9** | 53 | **2** |
| Assault (homicide) by other and unspecified means and their sequelae | 73 | **1.8** | 32 | **2.3** | | |
| Malignant neoplasms of colon, rectum and anus | 71 | **1.7** | | | | |
| Acute myocardial infarction | 68 | **1.7** | 27 | **1.9** | 41 | **1.6** |
| Leukemia | 66 | **1.6** | | | 49 | **1.9** |
| Anemias | | | 25 | **1.8** | | |
| Renal failure | | | 23 | **1.6** | | |
| Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified | | | 21 | **1.5** | 40 | **1.5** |
| Malignant neoplasms of trachea, bronchus and lung | | | 19 | **1.4** | 66 | **2.5** |
| Asthma | | | 19 | **1.4** | | |
| Pneumonia | | | 19 | **1.4** | | |
| Malignant neoplasm of cervix uteri | | | | | 48 | **1.9** |
| Congenital malformations, deformations and chromosomal abnormalities | | | | | 43 | **1.7** |
| Malignant neoplasm of ovary | | | | | 38 | **1.5** |
| Other and unspecified events of undetermined intent and their sequelae | | | | | 35 | **1.3** |

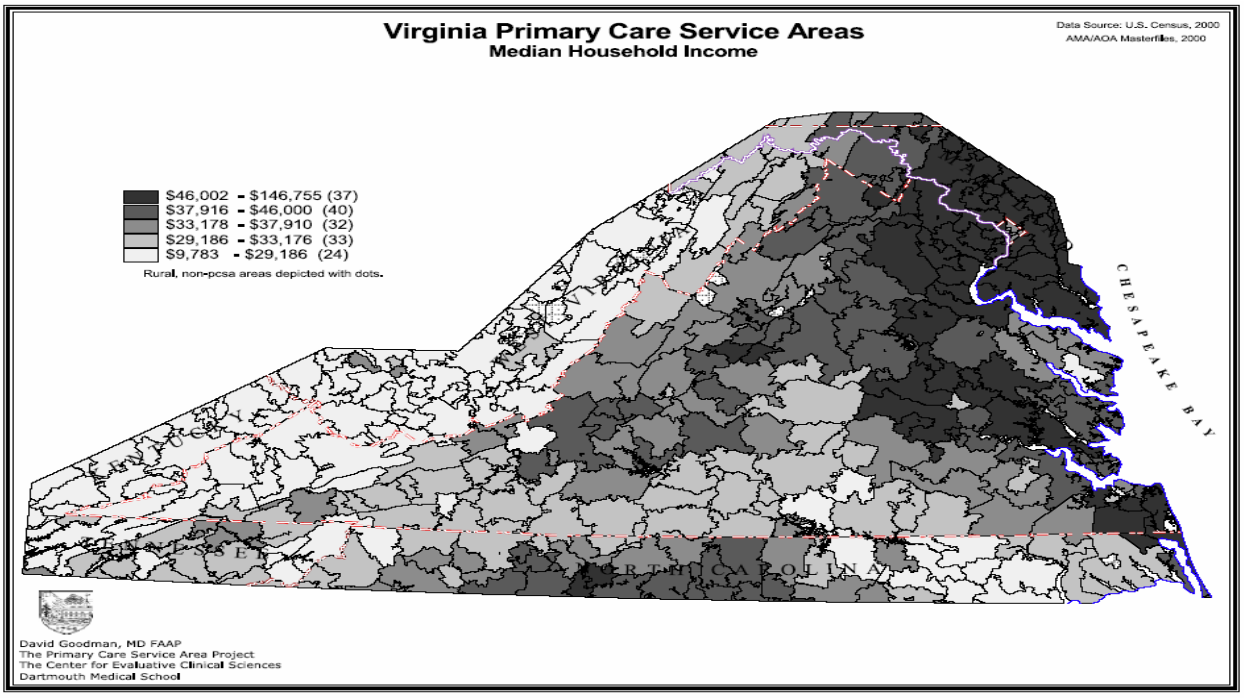
**Source: National Center for Health Statistics (NCHS)**

## B. Children

In general, Virginia's 1.6 million children and adolescents under 18 years of age are healthy. In 2003, 90% of parents reported their child or teenager less than eighteen years to be in excellent or good health and 95% stated that their school-aged child had not missed 11 or more days of school in the last 12 months due to illness or injury.[1] Over 270,000 children under age 18 are considered children with special health care needs, or 15.3% of all children and adolescents.[2]

Nearly one in ten people (9.3% average in 2001-2003) in Virginia lives under the poverty level, significantly lower than the 3-year average for the U.S. of 12.1%. The areas of the state with the highest median household income surround the population "crescent" that extends from Northern Virginia through Richmond and Charlottesville and to the tidewater area. The far southwest and southern areas have the lowest median household income (see map).

**Figure 19: Virginia Primary Care Service Areas, Median Household Income**



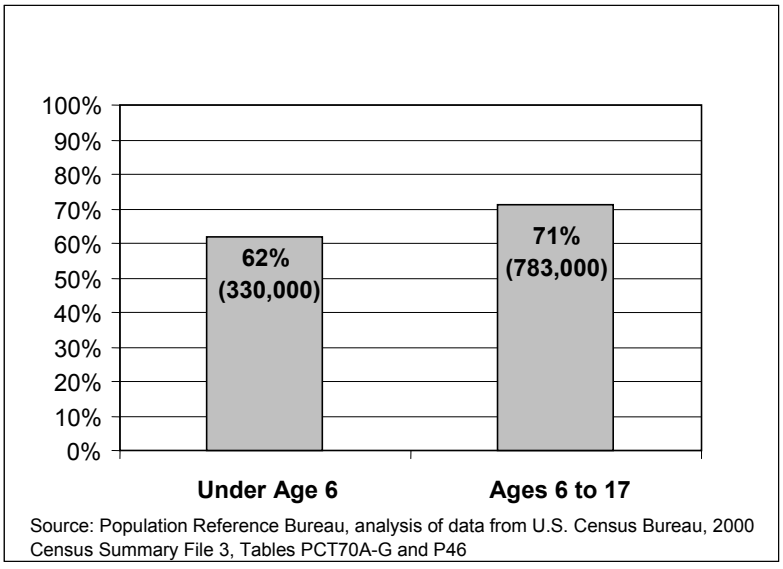

[1] Child and Adolescent Health Measurement Initiative (2005). *National Survey of Children's Health,* Data Resource Center on Child and Adolescent Health website. Retrieved 06/12/05 from www.nschdata.org .

[2] Child and Adolescent Health Measurement Initiative, *National Survey of Children with Special Health Care Needs: Virginia State Profile,* Retrieved 06/12/05 from http://cshcndata.org/DesktopDefault.aspx

Nearly 14% of children live in rural areas and one-fourth live in cities with populations of over 100,000. While nearly two-thirds of the children under 18 are white, they make up about one-third of children living in poverty. By contrast, whereas a little over one-fifth of the children are black, 30% live in poverty. Hispanic children make up 6% of children and youth in Virginia but nearly 30% of those under poverty.[3] Sizeable percentages (between 5-30% of total) of Hispanic children and youth live in northern Virginia, northwest Virginia, the Tidewater area, and counties bordering North Carolina. Most areas in Virginia have fewer than 5% of children ages 5-17 years living in households where the adults have some difficulty with English; the exception is Alexandria and Arlington where between 5 and 10% of children live in such homes.

One-fourth of children live in single-parent families. Among 62% of young children, both parents work whereas nearly three-fourths of children between ages 6 to 17 have two working parents.

**Figure 20. Percent of Children with All Parents Working in Virginia**




Source: Population Reference Bureau, analysis of data from U.S. Census Bureau, 2000 Census Summary File 3, Tables PCT70A-G and P46

[3] Child and Adolescent Health Measurement Initiative (2005). *National Survey of Children's Health,* Data Resource Center on Child and Adolescent Health website. Retrieved 06/12/05 from www.nschdata.org .

In Virginia, 70% of children under five attend nonparental child care. Among 3-5 year olds, 62.8% regularly attended preschool, kindergarten, Head Start or Early Start during the past month. Nationally, this percentage varies by income level, with only half of children under 200% of poverty with regular attendance in the past month as compared to three-quarters of children living in households at or above four times the poverty level.[4]

The number of child care slots has increased in Virginia from 227,078 in 2000 (181 per 1,000) to 328,687 (256 per 1,000) in 2004. [5] It is difficult to determine the exact number of children served in child care because enrollment data, which vary on a daily basis, are not available in Virginia. A recent study of Virginia child care data found that child care centers, on average, are filled to 74.1% of their licensed capacity.[6]

The Office of Family of Health Services of the Virginia Department of Health developed an on-line survey to assess perceptions among the general public and human services professionals of the major issues facing children and adolescents. The information regarding the on-line survey was sent to individuals and organizations with interest in the health of women and children. Those who received the notification about the on-line survey were encouraged to share it with others with similar concerns. Individuals who visited the Virginia Department of Health website were also invited to complete the survey. One hundred and ninety-four individuals and 69 organizational respondents completed the survey.

Overweight, the problem of health insurance coverage, and behavioral health issues were the top health concerns of both groups. Child abuse and neglect; unintended pregnancy; asthma; and tobacco, alcohol, and illicit drugs were additional issues. While the quantitative data cited later in this report supports the identification of these problems as major child and adolescent health issues, the respondents overlooked other major health problems such as injuries, dental disease and health concerns of children with special health care needs (table 14).

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[4] Child and Adolescent Health Measurement Initiative (2005). *National Survey of Children's Health,* Data Resource Center on Child and Adolescent Health website. Retrieved 06/12/05 from www.nschdata.org .

[5] These data represent the total capacity in four categories of child care regulated by the Virginia Department of Social Services: licensed child day centers, licensed family day homes, religious-exempt facilities (which are not required to be licensed), and licensed short-term day care providers. The rates reflect child care slots per 1,000 children ages 0-12. These data do not include unregulated child care. Source of data: Kids Count (online)

[6] Joint Legislative Audit and Review Commission. (2004) *Special Report: Impact of Proposed Child Day Care Center Regulations in Virginia*.

| Table 14. Five Major Health Issues of Children and Adolescents, by Individual and Organizational Respondents | |
|---|---|
| **Individual** | **Organization** |
| Overweight; lack of exercise/ poor nutrition | Overweight; lack of exercise/poor nutrition |
| Health insurance coverage | Health insurance coverage |
| Child abuse/neglect | Unintended pregnancy |
| Behavioral health issues | Asthma |
| Tobacco, alcohol, and illicit drugs | Behavioral health issues |

Source: Office of Family Health Services, Virginia Department of Health, *Maternal and Child Health Needs Assessment Survey, May 2005.*

When asked to suggest improvements for the Virginia Department of Health, organizational respondents' main recommendation was to assure enough qualified health providers; individuals' top suggestion was to inform and educate the public about health and prevention (table 15).

| Table 15. Top Three Suggestions for State Health Department Efforts to Better the Health of Children and Adolescents, by Individual and Organizational Respondents | |
|---|---|
| **Individual** | **Organization** |
| Inform and educate the public and families about health issues and prevention | Make sure there are enough qualified health care providers |
| Make sure health programs are working and available to all | Make sure health care programs are working and available to all |
| Help children and teenagers receive quality health care | Help children and teenagers receive quality health care |

Source: Office of Family Health Services, Virginia Department of Health, *Maternal and Child Health Needs Assessment Survey, May 2005.*

The OFHS, through a contract with the CVHPA, collected information from focus groups, public hearings, and key informants regarding the needs of children. Table 16 summarizes the identified issues and recommendations.

**Table 16. Identified issues affecting children and suggested recommendations**

### Access to and Cost of Health Care

- Inadequate access to medical and dental care services**,** particularly by the uninsured and Medicaid recipients;
- Growing cost of health care and its impact on health insurance coverage, especially lower income families and individuals;
- Critical shortage of pediatricians, pediatric specialists, support services, and dentists in many areas willing to serve children with Medicaid or FAMIS (Virginia SCHIP) coverage, generally due to low reimbursement rates; and
- Inadequate supply of dental, mental health, and substance abuse services for low-income children.

### Vulnerable Populations

- Immigrants' access to the myriad of health-related services, particularly linguistically and culturally appropriate services;
- Unmet health needs of low income, uninsured people and minority populations; and
- Identification and coordination of needed services for CSHCN.

### Prevention and Early Intervention

- Need for prevention and early intervention services, particularly for infants and children; and
- Need for education and initiatives for adolescents on health issues, particularly those addressing risky behaviors.

### Recommendations

1. Ensuring the availability of and coordination and collaboration among providers and services
2. Increasing and improving communication, leadership and planning, and develop additional resources (financial, data/information, and services)
3. Providing resources and leadership for planning and creating partnerships
4. Increasing communication, outreach activities, and collaborative activities to address community needs.
5. Providing easily accessible data on the populations served by OFHS.

Participants expressed appreciation for immunizations and WIC/nutrition services, the Bright Futures initiative, the New Parents kit, and the Care Connection for Children program for children with special health care needs. They also commended the data surveillance, research, and program evaluation; collaboration; development of coordinated services statewide; and community education and outreach. Participants noted approval of the growth in enrollment in Virginia's state children's health insurance program and its positive impact on delivering needed services to children. Key issues participants identified were:

- Access to and cost of health care;
- Unmet needs of vulnerable populations;
- Need for a greater focus on prevention and early intervention; and
- Fostering of greater coordination, communication and collaboration.

In addition to qualitative data, Virginia has quantitative data that can provide information on the overall health status of children. Numerous research and data collection efforts have been conducted in Virginia by local, state and federal agencies in order to describe the overall health status of children in Virginia. Data has been collected regarding illnesses, injuries, hospitalizations, deaths, dental care, teen pregnancy, nutrition, etc. and will be shared in this report. The first subject we will discuss involves childhood injuries and hospitalizations since these issues are prevalent among children.

The majority of childhood injuries were unintentional across all of the age groups, accounting for more than 75% of all injuries among children 0-14. Children 5-9 years old were most likely to experience unintentional injuries, accounting for 98% of their overall injuries, compared to 95% of 1-4 year olds, 81% of 10-14 year olds, and 76% of children less than one. Children 15-19 were least likely to experience unintentional injuries and most likely to experience self-inflicted injuries. However, self-inflicted injuries rise considerably for children older than ten years of age. Children less than one were most likely to be assaulted (12.5%) than any other age group.

**Table 17. Intent of Injury by Age Group (0-19 years), 2003**

| Intent | Age Groups | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Less than 1 | | 1 to 4 | | 5 to 9 | | 10 to 14 | | 15 to 19 | |
| | N | % | N | % | N | % | N | % | N | % |
| Unintentional | 165 | 76.4 | 529 | 95.0 | 504 | 98.1 | 613 | 81.1 | 1,109 | 60.2 |
| Self-inflicted | 0 | .0 | 0 | .0 | 1 | .2 | 93 | 12.3 | 454 | 24.6 |
| Assault | 27 | 12.5 | 16 | 2.9 | 7 | 1.4 | 31 | 4.1 | 203 | 11.0 |
| Undetermined | 24 | 11.1 | 12 | 2.2 | 2 | .4 | 19 | 2.5 | 77 | 4.2 |
| **TOTAL** | **216** | **100** | **557** | **100** | **514** | **100** | **756** | **100** | **1,843** | **100** |

**Source: Center for Injury and Violence Prevention, Virginia Department of Health. Injury in Virginia 2003: A Report on Injury-Related Deaths and Hospitalizations. Totals may not equal 100% due to rounding errors.**

In Virginia in 2003, one in ten children under six years of age had an injury in the past 12 months that required medical attention. Nationally, this percentage is higher among white (10.8%) than black (7.4%) or Hispanic (6.2%) children; greater in higher income (10.2% in families $\geq$ 400% of poverty) than in families living in poverty (7.4%); and higher among boys 10.5%) than girls (8.2%).

Overall, children under one year old were most likely to have a injury related hospital discharge with a rate of 218.13 per 100,000 than children 10-14 (145.23), 1-4 (142.02), or 5-9 (106.13). However, only 5% of all hospitalizations among children are due to injuries.

**Table 18. Injury Hospitalization Rates for children aged 0-19, 2003**

| Age | Total Hospital Discharges (THD) | Injury Discharges (% of THD) | Rate per 100,000* | Age Adjusted Rate** |
|---|---|---|---|---|
| Less than 1 | 102,455 | 216 (0.2) | 218.13 | 3.01 |
| 1 to 4 | 12,137 | 557 (4.6) | 142.02 | 7.86 |
| 5 to 9 | 7,368 | 514 (7) | 106.13 | 7.70 |
| 10 to14 | 9,201 | 756 (8.2) | 145.23 | 10.61 |
| 15 to 19 | 22,407 | 1,843 (8.2) | 362.54 | 26.16 |

**Source: Center for Injury and Violence Prevention, Virginia Department of Health. Injury in Virginia 2003: A Report on Injury-Related Deaths and Hospitalizations. *Crude rate per 100,000 population **Adjusted to 2000 standard population**

The data show that most injury hospitalizations are due to falls for children. Among children under one, falls account for more than one-fourth (28.7%) of all injury hospitalizations compared to 25.5% of 1 to 4 year olds, and 37.2% of injuries for 5 to 9 year olds. Other causes of injury hospitalizations that are prevalent among children were Motor Vehicle Traffic (MVT) occupant and poisoning. The chart below displays the top five causes for injury hospitalizations f or all age groups.

**Table 19. Top five causes of injury hospitalizations by age group**

| Less than 1 | 1 to 4 | 5 to 9 | 10 to 14 | 15 to 19 |
|---|---|---|---|---|
| Fall | Fall | Fall | Fall | Poisoning |
| Poisoning | Poisoning | MVT occupant | Poisoning | MVT occupant |
| Hot object/substance | Hot object/substance | Pedal cyclist, other | Struck by, against | Fall |
| MVT occupant | Bites and stings | Struck by, against | MVT occupant | Struck by, against |
| Other environmental | MVT occupant | MVT pedestrian | Transport, other | Firearm |

***Excludes unspecified and other specified and classifiable categories. VHI Patient Level Database, 2003**

For children 0-14 years old, the non-fatal hospitalization rate due to MVT has been on the decline since 1999. In 1999, the non-fatal hospitalization rate due to MVT per 100,000 children aged 10-14 was 22.9, compared to 16.8 in 2003.

The most prevalent types of hospitalizations among children, not due to injury are:

- newborns with conditions (25.6% of all discharges);
- delivery (vaginal and cesarean) (12.1%);
- asthma and bronchitis (6.9%);
- injuries (4.7%); and
- psychoses (3.6%).

The average length of hospital stay for newborns is 6.8 days, compared to 2.3 days for delivery, 3.5 days due to asthma and bronchitis, 3.7 days for injuries, and 8.4 days for psychoses. Children suffering from depression is less prevalent, however their hospital stay on average is16.8 days, at least twice the average number of days when compared to the top five causes of hospitalization.

Even though asthma is one of the most prevalent types of hospitalizations among children in Virginia, only eleven percent of all children under eighteen have asthma. About one-third of these children with asthma are reported by their parents to experience no health effects from the condition. However, 14% of these children suffer a great deal or medium amount of burden and 4% have been hospitalized in the past 12 months. Nationally, asthma rates are higher among black children and youth (16.3%), compared to white (10.4%) and Hispanic children (9.8%). The economic disparity is not as significant – 13.0% among children living in poverty versus 10.3% among those in families at four times the poverty rate. Hospitalization rates among black children are twice those for white and Hispanic children (1.1% versus 0.4% and 0.5% respectively).

## Table 20: Top 20 Causes of Hospitalization, Ages 0-21

| Condition | Frequency | Percent of all discharges | Crude Rate/ 100,000* | Median Age | Average Charge ($) | Avg. Length of Stay (Days) |
|---|---|---|---|---|---|---|
| Neonates with conditions | 25,700 | 25.6 | 1,203 | 0 | 15805 | 6.8 |
| Vaginal delivery (ages 13-21) | 12,150 | 12.1 | 569 | 19 | 5114 | 2.3 |
| Asthma and bronchitis | 6,888 | 6.9 | 322 | 1 | 5376 | 3.5 |
| Injuries | 4,728 | 4.7 | 221 | 16 | 15226 | 3.7 |
| Psychoses | 3,605 | 3.6 | 169 | 16 | 8297 | 8.4 |
| Cesarean delivery (ages 13-21) | 3,409 | 3.4 | 160 | 20 | 9648 | 3.6 |
| Dehydration | 3,303 | 3.3 | 155 | 2 | 3264 | 1.8 |
| Simple pneumonia | 3,241 | 3.2 | 152 | 3 | 6107 | 2.7 |
| Bipolar disorders | 2,690 | 2.7 | 126 | 15 | 11241 | 13 |
| Nonbacterial gastroenteritis and abdominal pain | 2,136 | 2.1 | 100 | 4 | 3922 | 1.9 |
| Appendectomy | 1,888 | 1.9 | 88 | 14 | 12299 | 2.5 |
| Epiglottitis, otitis media, upper respiratory infection and laymgotracheitis | 1,884 | 1.9 | 88 | 2 | 4011 | 2.1 |
| Seizure | 1,413 | 1.4 | 66 | 4 | 7613 | 2.3 |
| Other antepartum diagnoses | 1,243 | 1.2 | 58 | 19 | 5524 | 2.7 |
| Depression | 1,218 | 1.2 | 57 | 16 | 12678 | 16.9 |
| Kidney and urinary tract infections | 1,164 | 1.2 | 54 | 4 | 5861 | 2.9 |
| Diabetes | 1,067 | 1.1 | 50 | 14 | 6552 | 2.4 |
| Poisoning and toxic effects of drugs | 1,020 | 1 | 48 | 17 | 6158 | 1.8 |
| Respiratory system signs, symptoms, and other diagnoses | 816 | 0.8 | 38 | 1 | 6000 | 2.7 |
| Viral illness | 781 | 0.8 | 37 | 1 | 4618 | 2.4 |
| Total, top 20 causes | 80,344 | 79.9 | 3,760 | | 9,979 | 4.8 |
| **Total (all causes)** | **100,519** | **100** | **4,705** | | | |

*Note: excludes newborns without conditions (N=67,330)*

**Crude rate calculated using 2000 US Census for Virginia population aged 0-21.*

***Adjusted rate calculated for Top 20 causes only using gender and age adjusted for U.S. population 0-21.*

There are some conditions that require hospitalization that are preventable as shown in Table 21 including injuries (22%), other upper airway conditions (20%), dehydration (14.6%), and pneumonia. Not only are injuries the most prevalent type of preventable hospitalization, it is also the most expensive to treat.

**Table 21. Total Charges Associated with Potentially Preventable Hospitalizations**

| Condition | Number of Discharges | % | Total Charges ($) |
|---|---|---|---|
| Asthma | 859 | 4.0 | 4,142,293 |
| Cellulites | 824 | 3.8 | 5,621,208 |
| Congenital syphilis | 1 | 0.0 | 7,199 |
| Dehydration | 3,174 | 14.6 | 10,272,331 |
| Dental conditions | 61 | 0.3 | 831,694 |
| Diabetes | 1,104 | 5.1 | 7,305,044 |
| Epilepsy and seizures | 8 | 0.0 | 61,183 |
| Gastroenteritis | 1,494 | 6.9 | 5,011,732 |
| Immunization preventable conditions | 699 | 3.2 | 5,667,401 |
| Injuries | 4,728 | 21.8 | 71,986,853 |
| Nutritional deficiencies | 160 | 0.7 | 1,333,174 |
| Other upper airway conditions | 4,359 | 20.1 | 24,676,914 |
| Pelvic inflammatory disease | 141 | 0.6 | 1,168,187 |
| Pneumonia | 2,921 | 13.4 | 19,723,251 |
| Tuberculosis | 7 | 0.0 | 323,578 |
| Urinary tract/kidney infection | 1,183 | 5.4 | 7,015,838 |
| **Total** | **21,723** | **100.0** | **165,147,880** |

**Source: Division of Immunization, Virginia Department of Health, *Virginia Immunization Survey Results.***

Some injuries and hospitalizations result in the death of a child. The child death rates have declined since the early 1980s. In 2002, there were 590 deaths in Virginia to children ages 1 – 19, for a crude death rate of 31.3 for every 100,000 children (Table 22).

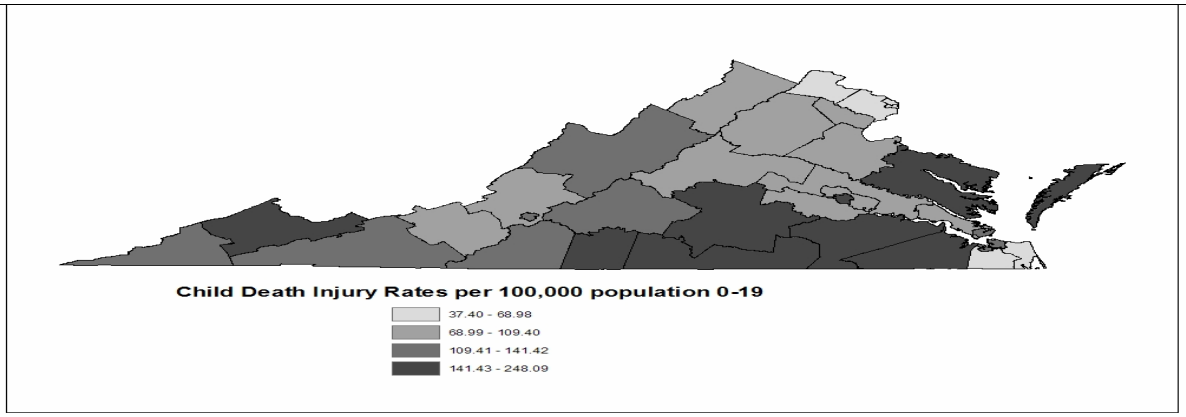
**Table 22. Childhood Mortality, Virginia, 2002**

| Age | Number of Deaths | Population | Crude Death Rate |
|---|---|---|---|
| 1- 4 years | 108 | 383,788 | 28.1 |
| 5- 9 years | 72 | 485,264 | 14.8 |
| 10-14 years | 92 | 515,456 | 17.8 |
| 15-19 years | 318 | 500,781 | 63.5 |
| Total | 590 | 1,885,289 | 31.3 |

**Source: United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Compressed Mortality File (CMF) compiled from CMF 1968-1988, Series 20, No. 2A 2000, CMF 1989-1998, Series 20, No. 2E 2003 and CMF 1999-2002, Series 20, No. 2H 2004 on CDC WONDER On-line Database.**

The death rates decline after the preschool years, but peak for adolescents, such that there are more deaths among 15-19 year olds (318) than for all 1-14 year olds (272). The child death injury rates vary across different Virginia health districts as seen in the map below. It appears that northern health districts have fewer injury related deaths per 100,000 than health districts in the southern regions.

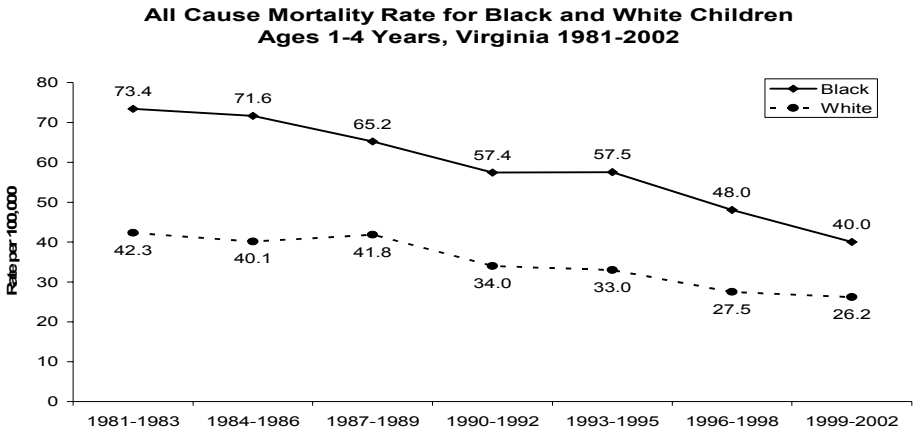
**Figure 21. Child Death Injury Rates by Virginia Health District, 1999-2003**

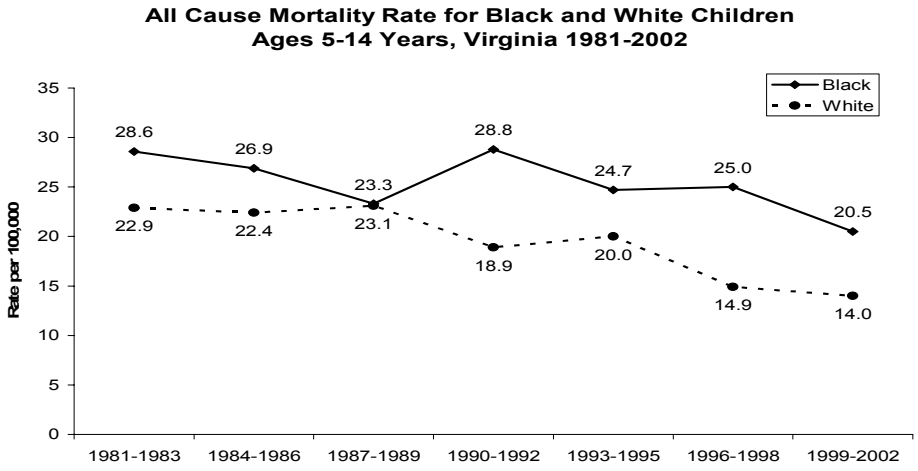



Predictably, the rates and causes of death during the childhood years vary, with changes in development, levels of independence and parental supervision, access to care, and exposure to risks. This reduction is especially striking among white school children ages 5-9 (52% cut); black preschool children, among whom the death rate has been cut by nearly half (45%); white preschool children, for whom the decline approaches 40%; and black children ages 5-9 (36%).

The exception has been the death rate to black teenagers (15-19 years), which has risen by 41% since the early 1980s, although the rate has declined since it peaked in the early 90s (see figures 22 - 24).

**Figures 22 - 24: All cause mortality rates for Black and White Children, 1981-2002**



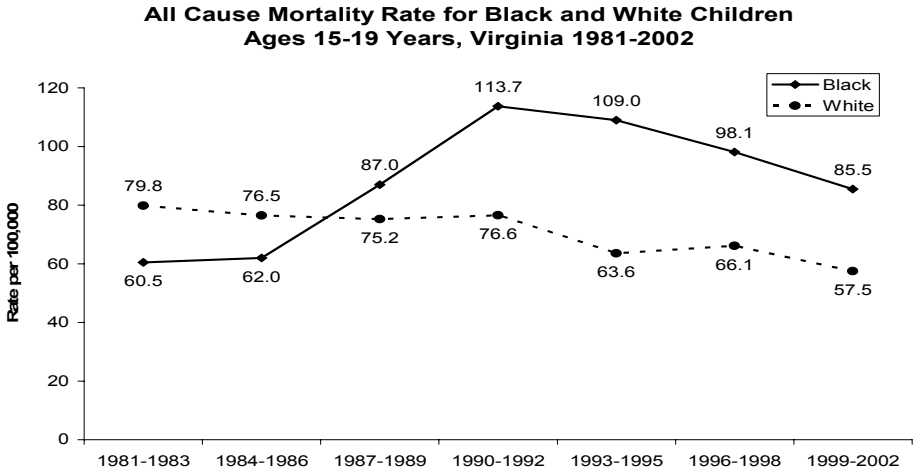
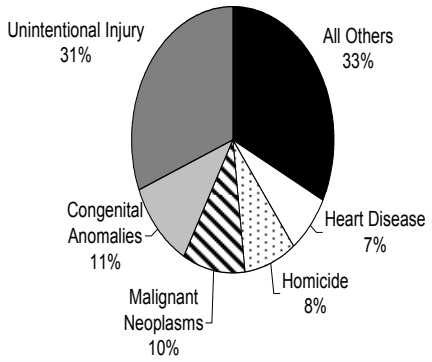
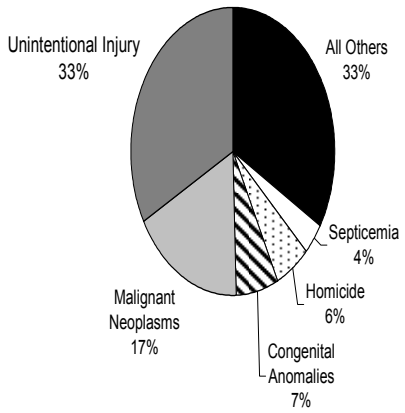



**Figure 25-28. Major Causes of Death to Children by Age Group, 2000-2002**

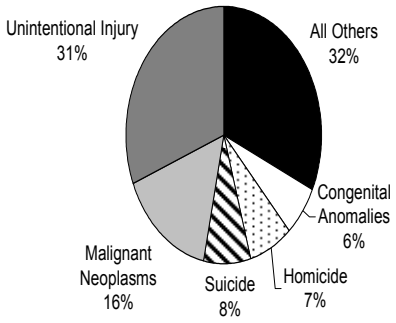
**Major Causes of Death to Children Ages 1 to 4 Years**
**Virginia 2000-2002**



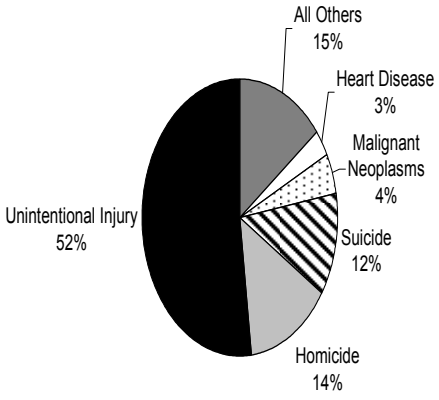

**Major Causes of Death to Children Ages 5 to 9 Years**
**Virginia 2000-2002**




**Major Causes of Death to Children Ages 10 to 14 Years**
**Virginia 2000-2002**




**Major Causes of Death to Children Ages 15 to 19 Years**
**Virginia 2000-2002**




Source: US DHHS, CDC, NCHS, Compressed Mortality File (CMF) compiled from CMF 1968-1988, Series 20, No. 2A 2000, CMF 1989-1998, Series 20, No. 2E 2003 and CMF 1999-2002, Series 20, No. 2H 2004 on CDC WONDER On-line Database

The figures on the previous page (Figures 25-28) show that unintentional injuries are the most common cause of death among children of all age groups. Unintentional injuries are the major cause of death (representing between 31% and 52% of all deaths in each 5-year age group) for all childhood age groups under twenty years of age, however the type of unintentional injury will vary. The majority (77%) of unintentional injury deaths for this age group involved motor vehicle traffic MTV incidents and drowning.

The rate of unintentional injury deaths among children 0-14 years of age has remained relatively steady since 1999. In 2003, the death rate due to unintentional injuries was 6.4 per 100,000 children aged 0 to 14. The death rate for black children was slightly higher in 2003 and lowest for Hispanic children. Children under one (28.28) and 10-14 years old (9.03) had the highest injury death rates per 100,000. However, about half of all deaths were injury related among 5-9 year olds and 10-14 year olds.[7]

**Table 23. Unintentional injury death rates among children 0-14 years of age per 100,000**

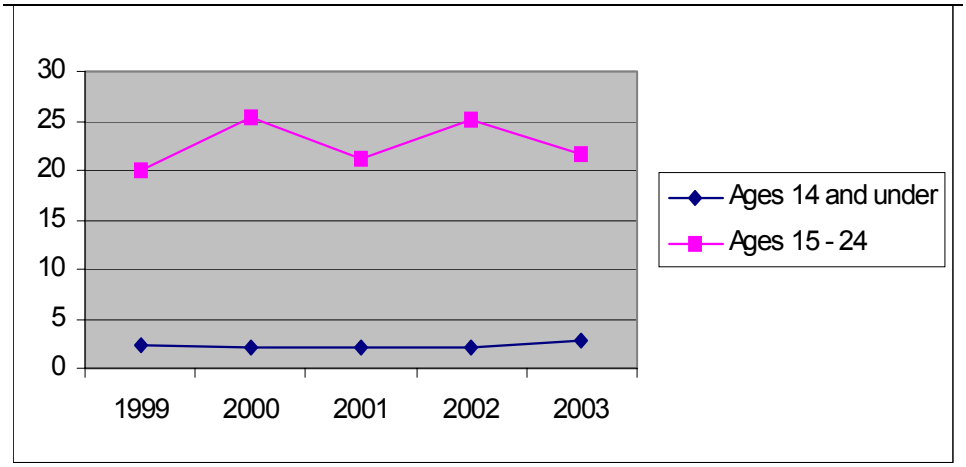
| | Year | | | | |
|---|---|---|---|---|---|
| **Race** | **1999** | **2000** | **2001** | **2002** | **2003** |
| Black | 9.1 | 11.6 | 7.1 | 7.3 | 7.5 |
| Hispanic | 13.5 | 2.2 | 3.2 | 6.0 | 5.6 |
| Other | 3.4 | 3.2 | 3.1 | 5.8 | 7.0 |
| White | 5.3 | 6.3 | 6.4 | 5.8 | 6.0 |
| Total | 6.6 | 7.2 | 6.2 | 6.2 | 6.4 |

**Source: VHI Patient Level Database, 1999-2003**

The injury deaths rates due to motor vehicle crashes have remained constant since 1999 for children 14 year and younger while they have fluctuated during that same time period for adolescents and young adults aged 15-24.

[7] Center for Injury and Violence Prevention, Virginia Department of Health. *Injury in Virginia 2003: A Report on Injury-Related Deaths and Hospitalizations.*

**Figure 29. Death Rate per 100,000 from Motor Vehicle Crashes**



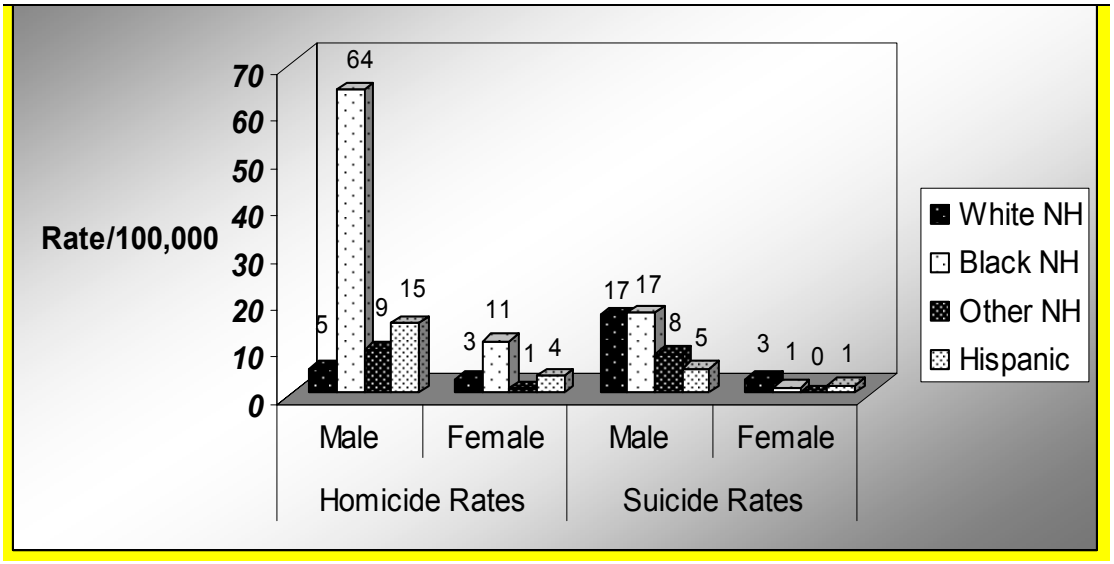

Other types of deaths among children are intentional including homicides and suicide. Homicides are a top cause of death for all age groups, and the second cause of death for 15-19 year olds. More than half (57%) of homicides for this age group occur among black males compared to 13% of Hispanic males, while the group least likely to die from homicides are other non-Hispanic females.

Suicides have become the third major cause of death beginning with the 10-14 year olds and this trend continues among older teenagers (See figures 27 and 28). For every suicide, there are 25 suicide attempts. Suicide attempts are three times more common in women than in men[8]. Nationally in 2003, close to 9% of youth reported attempting suicide during the past year. The percentage was over twice as high among females (11.5%) than males (5%) and was lowest among white male youth (4%) and highest among Hispanic females (15%). Nearly 30% of youth have felt sad and hopeless for two weeks or more during the past year, such that they have stopped some usual activities: this feeling was highest among Hispanic females (45%).[9]

[8] McIntosh, J.L. (2003). *U.S.A. Suicide: 2001 Official Final Data.* Retrieved June 12, 2004, from the American Association of Suicidology website: http://www.suicidology.org/associations/1045/files/2001datapg.pdf

[9] USPHHS, Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance System: Youth Online Comprehensive Results, 1991 – 2003. Retrieved July 29, 2004, from the Centers for Disease Control and Prevention website: http://apps.nccd.cdc.gov/yrbss/

**Figure 30. Homicide and Suicide Rates among 15-24 year olds by Race/Ethnicity and Gender, 1999-2003**



A number of estimates for common childhood conditions were obtained through the first National Survey of Children's Health, conducted in 2003. State-specific data are shown in Table 24[10].

**Table 24. Frequency of Select Health Conditions of Childhood and Youth, Virginia, 2003**

| Health Conditions | Percent (%) |
|---|---|
| **Overweight in Virginia (10-17 year olds)** | |
| • % of children at risk of overweight or overweight | **30.5** |
| • % of children who are overweight | **13.8** |
| **At-Risk for Developmental Delay in Virginia (1-5 year olds)** | |
| • % who are at moderate or high risk for developmental delay | **24.5** |
| **Asthma in Virginia (0-17 year olds)** | |
| • % with asthma | **11.1** |
| • % with health effects from asthma | **7.4** |
| **Injuries in Virginia (0-5 year olds)** | |
| % of children with injuries in past 12 months requiring medical attention | **10.0** |
| **Social and Emotional Difficulties in Virginia (3-17 year olds)** | |
| Child has moderate or severe difficulties in areas of emotions, concentration, behaviors and being able to get along with others | **8.1** |
| **Problematic Behaviors in Virginia (6-17 year olds)** | |
| Child often exhibits problematic behaviors | **6.8** |
| **ADD/ADHD in Virginia (2-17 year olds)** | |
| % who have been told by a health professional they have ADD/ADHD | **7.1** |
| **Dental Health (1-17 year olds)** | |
| • % of parents who describe their children's teeth as fair or poor | **5.9** |

**Source: Child and Adolescent Health Measurement Initiative (2005). *National Survey of Children's Health,* Data Resource Center on Child and Adolescent Health web site. Retrieved 06/12/05 from www.nschdata.org .**

Dental decay remains the most prevalent chronic disease in children in Virginia. The last statewide dental survey of Virginia school children completed in 1999 showed that 50% of children had dental decay in their primary teeth and 30% of children had dental decay in their permanent teeth. Just under half (47%) of the children with caries on their permanent teeth had

[10] While many conditions were measured through the survey, several conditions were not collected, such as risky behaviors of adolescents, exposure to violence, and objective measures of dental health.

them filled. This problem was particularly pervasive among children who received free school lunches (family income < 130% of poverty): three fourths of these children had untreated caries as compared to 42% of children not receiving free lunches. [11]

**Table 25. Indicators of Dental Health in School children, Virginia, 1999**

| Dental Health Indicator | Percent of Children |
|---|---|
| Overall Prevalence of Dental Caries | |
| • Primary Teeth (children < 10 years) | 59.1% |
| • Permanent Teeth (all children) | 46.9% |
| Unmet Filling Needs | |
| • Primary Teeth (children < 10 years) | 56.7% |
| • Permanent Teeth (all children) | 47.0% |
| Fluorosis | |
| • Third-graders | 27.1% |
| • 10th graders | 24.8% |
| Oral Hygiene | |
| Fair or poor oral hygiene index | 41.1% |
| At Least One Dental Sealant | |
| • All Children | 57.1% |
| • Third-graders | 43.4% |

**Source: Division of Dental Health, Virginia Department of Health. 1999 Dental Needs Assessment of Virginia School Children.**

These findings are significant because it has been proven that dental decay experience in primary teeth is a consistent predictor of future disease. It is also well documented that poor oral health can have both financial and social costs. Chronic pain and oral disease can lead to poor nutritional status, affect speech development, interfere with learning and contribute to "failure to thrive." Population growth in the pediatric population is expected to be greatest in low socioeconomic groups at highest risk for dental decay. As these populations grow and access to dental professionals is limited, the gap may increase for children with oral health disparities.

It appears that parental perception of their children's dental health does not reflect the true condition of their teeth. In 2003, when Virginia parents of children ages 1-17 were asked about the condition of their child's teeth, three-quarters (75.9%) affirmed they were in excellent or very

[11] Division of Dental Health, Virginia Department of Health. *1999 Dental Needs Assessment of Virginia Schoolchildren.*

good condition[12]. At the national level, significantly fewer parents (68.5%) made this statement about their children's dental health. In Virginia, as nationally, the percentage varies by income level, with those children living in the poorest households having reportedly poorer dental health:

- 63.8% of children living under the poverty level with excellent or very good dental health;
- 84.9% of children living in households at or above four times the poverty level.

However the lowest income children seem to fare significantly better in Virginia than nationally: 63.8% versus 48.8% with excellent or very good dental health, respectively.

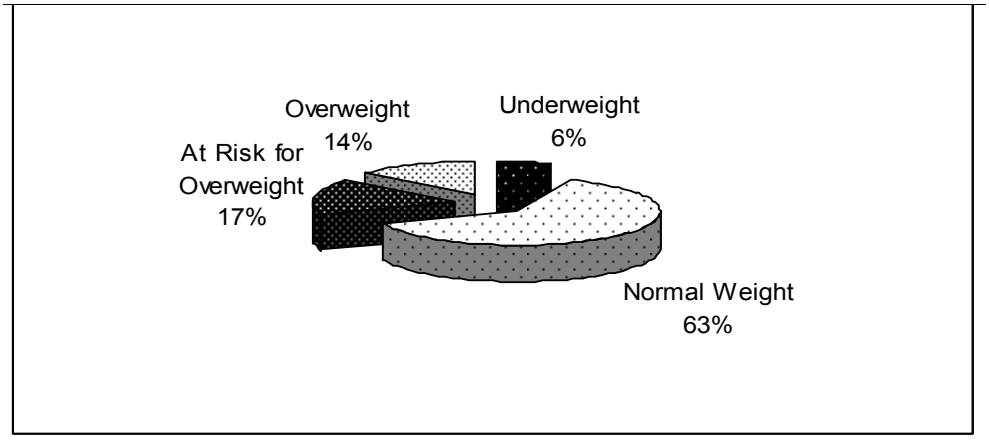
The results from the 2003 National Survey of Children's Health[13] indicated that nearly one-third (30.5%) of children ages 10-17 years in Virginia are either at risk of overweight or overweight (see Figure 31). This percentage is similar at the national level. Whereas the variations among racial and ethnic groups of children who are overweight or at risk for overweight are minimal at the national level[14], the percentage of black children who are overweight is nearly twice the percentage for white children (23.5% versus 12.0%) and 18.8% of Hispanic children are overweight. There is an even more striking disparity by income level: 22.4% of children nationally who live in households under 100% of poverty are overweight compared to 9.1% of those in households at 400% of poverty and above.

[12] Note: Contrast this statistic with the 90% of parents who stated their children's overall health to be good or excellent.

[13] Child and Adolescent Health Measurement Initiative (2005). *National Survey of Children's Health,* Data Resource Center on Child and Adolescent Health website. Retrieved 06/12/05 from www.nschdata.org .

[14] Estimates for Virginia by sub-group have very large confidence intervals; therefore estimates are less precise than national estimates.

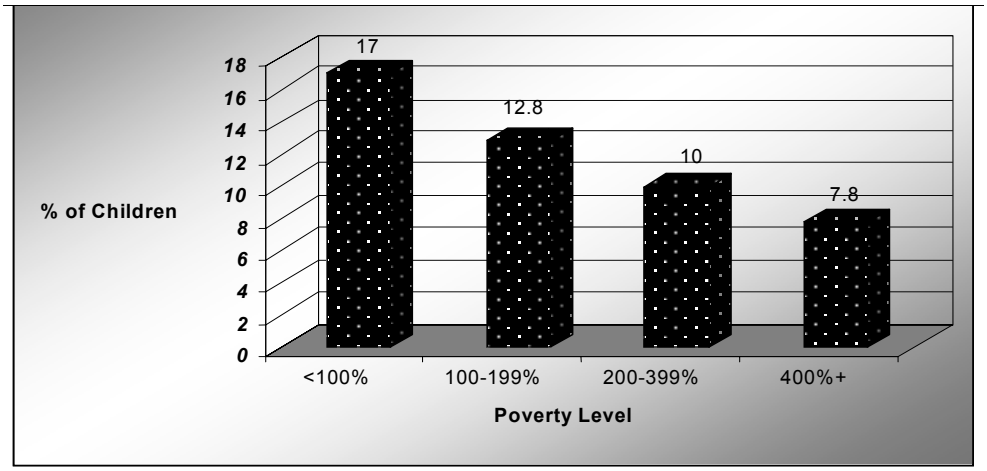
**Figure 31. Body Weight Status of Children Ages 10-17, Virginia, 2003**




**Source: Child and Adolescent Health Measurement Initiative (2005). *National Survey of Children's Health,* Data Resource Center on Child and Adolescent Health web site. Retrieved 06/12/05 from www.nschdata.org .**

In Virginia, over half of children ages 6-17 are reported to have engaged in vigorous physical activity at least 4 times a week; 24% exercised vigorously every day. Eleven percent engages in no vigorous physical activity, or are inactive. The level of physical activity varies by income level. For example, nationally, 17% of children living in households earning less than the poverty level are inactive as compared to 8% of children from households at or over 400% of the poverty level (see Figure 32).

**Figure 32. Percent of Inactive Children (ages 6-17) in Past Week by Poverty Level, U.S., 2003**




***Inactive is defined as not having engaged in vigorous physical activity for at least 20 minutes in the past week.**
**Source: Child and Adolescent Health Measurement Initiative (2005). *National Survey of Children's Health,* Data Resource Center on Child and Adolescent Health web site. Retrieved 06/12/05 from www.nschdata.org .**

One in five children and youth has a mental health treatment need and one in ten has a serious emotional disturbance that may severely disrupt daily functioning.[15] The latter statistic is close to that found in the 2003 National Survey of Child Health, which found that 8.1% of 3-17 year olds had moderate or severe difficulties in areas of emotions, concentration, behaviors and being able to get along with others. This percentage varies by family income level, with 14.0% of children in poor families having these problems as opposed to 6.1% in families with incomes at or greater than four times the poverty level. The problem becomes increasingly evident by age: parents report only 6.7% of their four to seven year-olds with this problem as compared to 11.2% of 12-14 years olds. The problem is more common among boys (11.3%) than girls (6.9%).[16] Depression begins to take its toll among school-age children: the prevalence rate jumps from one in 33 children to one in eight teenagers.[17]

In a recent study of mental disorders among adults in English-speaking households ages eighteen and older, the age of onset of various mental disorders was reported to be:

**Table 26. Mental Disorders and Median Age of Onset**

| Mental Disorder | Median Age of Onset | Age of Onset Range |
|---|---|---|
| Anxiety Disorders | 11 years | Ages 6 – 20 |
| Impulse Control | 11 years | Ages 7 – 15 |
| Substance Use | 20 years | Ages 18 - 27 |
| Mood Disorders | 30 years | Ages 18 – 43 |

**Source: Kessler RC, Berglund P, Demler O, et al. 2005. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry 62(6):593-602.**

[15] U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services. (1996). *Prevalence of serious emotional disturbance in children and adolescents. United States Mental Health,* 1996. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental health Services, National Institutes of Health, National Institute of Mental Health qtd. in Association of State and Territorial Health Organizations. *Mental Health Resource Guide (2002).* Retrieved 06/18/05 from http://www.astho.org/pubs/ASTHO_Insert_1.pdf

[16] Child and Adolescent Health Measurement Initiative (2005). *National Survey of Children's Health,* Data Resource Center on Child and Adolescent Health website. Retrieved 06/18/05 from www.nschdata.org .

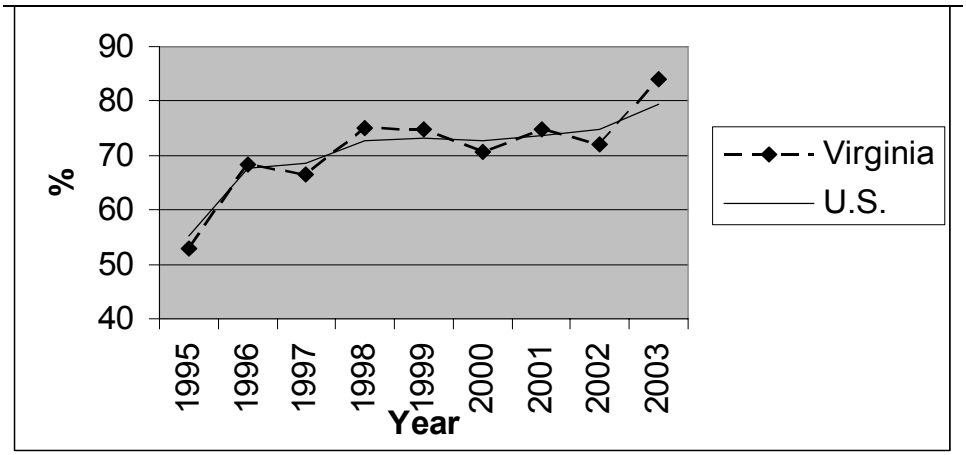
[17] U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services. (1996). *Prevalence of serious emotional disturbance in children and adolescents. United States Mental Health,* 1996. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental health Services, National Institutes of Health, National Institute of Mental Health qtd. in Association of State and Territorial Health Organizations. *Mental Health Resource Guide (2002).* Retrieved 06/18/05 from http://www.astho.org/pubs/ASTHO_Insert_1.pdf

Estimates of the prevalence of Attention Deficit/Hyperactivity Disorder (ADHD) range from 1.9% to 17.8%: the variation explained by differences in the method of ascertainment, diagnostic system, measures used, informants, and the population sampled.[18] In Virginia, the prevalence was reported as 7.1%, with nearly half not taking medications for the disorder. [19]

In primary school children, the ratio of boys to girls with ADHD ranges from 3:1 to 9:1 in clinical settings but by adolescence, the ratio is 1:1. The male to female ratio ranges from 4:1 for the predominantly hyperactive impulsive type to 2:1 for the predominantly inattentive type. Among older adolescents, the ratio is 1:1. [20]

In 2003 in Virginia, 84% of two-year olds were fully immunized against diphtheria, tetanus, pertussis, polio, measles, mumps, rubella, *haemophilus influenzae* type b, and hepatitis B.[21] This is higher than the national rate of 79% although the rates in Virginia have a trend similar to national rates. The rate has risen gradually since from 52.8% in 1995.

**Figure 33. Immunization Rates among Two-Year Old Children, Virginia and U.S., 1995-2003**




In Virginia, in one-third of households with children under the age of six years, respondents stated that someone in their household smoked cigarettes, cigar, or a pipe. In one in eight (12%)

[18] Greenhill, L, Benton, T, and Tirmizi, I. Attention Deficit/Hyperactivity Disorder: A Common Diagnosis? Medscape Psychiatry & Mental Health 8(1), 2003. Retrieved on 06/18/05 from http://www.medscape.com/viewarticle/448491?src=search

[19] Child and Adolescent Health Measurement Initiative (2005). *National Survey of Children's Health,* Data Resource Center on Child and Adolescent Health website. Retrieved 06/18/05 from www.nschdata.org .

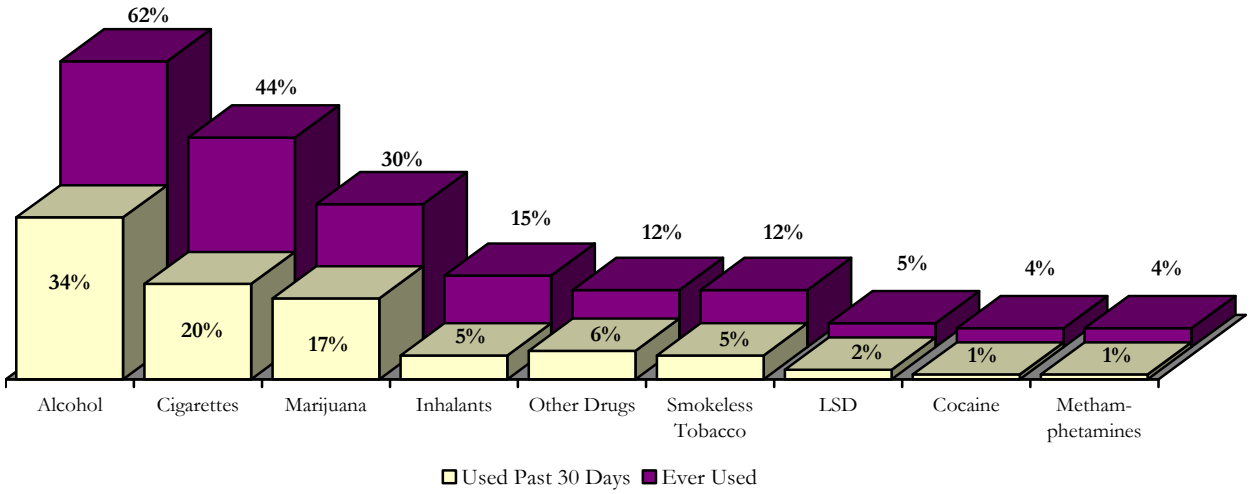
[20] Greenhill, L, Benton, T, and Tirmizi, I. Attention Deficit/Hyperactivity Disorder: A Common Diagnosis? Medscape Psychiatry & Mental Health 8(1), 2003. Retrieved on 06/18/05 from http://www.medscape.com/viewarticle/448491?src=search

[21] Fully immunized indicates vaccination with four or more doses of DTP, three or more doses of poliovirus vaccine, one or more doses of any measles-containing vaccine (MCV), three or more doses of Hib, and three or more doses of HepB.

households with young children, people were allowed to smoke inside their home on a regular basis. [22]

A survey of 8th, 10th, and 12th graders from Virginia public middle and high schools found that nearly two-thirds (62%) of these youth had ever used alcohol and one-third (34%) had used it in the past 30 days. One out of every five youth (20%) had smoked cigarettes in the past 30 days and a similar number (17%) had smoked marijuana. Approximately one in eight had ever tried inhalants (15%), other drugs (12%), or smokeless tobacco (12%). The least frequently ever used substances were LSD (5%), cocaine (4%), and methamphetamines (4%) (Figure 34).

**Figure 34: Virginia Lifetime and Past 30 Day Use of Alcohol, Tobacco, and Other Drugs (Ranked by Lifetime Use), 2003.**




Forty-four percent of students felt that laws and norms were favorable toward alcohol, cigarette, and marijuana use and 35% reported their parents had favorable attitudes towards alcohol, cigarette, and marijuana use. Similarly, one-third (34%) believe that use of alcohol, cigarettes, and marijuana posed little risk to them. Sixteen percent reported getting drunk or high at school in the past year and one in ten (9%) admitted selling illegal drugs in the past year.

Data on sexual attitudes, knowledge and behavior of youth in Virginia is not available. Teen pregnancy is covered in Section II-A on Pregnant Women, Mothers and Infants Health. However, reports of sexually transmitted diseases among teenagers are available. In 2003, there

[22] Ellis, J., Adler, J., Sarkar, M., *Results from the 2001 Virginia Children's Health Access Survey,* The Survey and Evaluation Research Laboratory, Center for Public Policy, Virginia Commonwealth University, August 2002.

were 6,300 cases of chlamydia (rate of 25.7/1,000) and 1,755 cases of gonorrhea (rate of 7.1/1,000) among females ages 15-19 years.

Antisocial behavior is common among youth, both in the family and at school. In 2003, Virginia youth reported that in the past year:

⇒ 41% experienced frequent family conflict

⇒ 40% reported poor family management

⇒ 34% admitted early initiation of problem behaviors

⇒ 29% reported easy availability of guns in their community

⇒ 15% had been suspended from school

⇒ 15% attacked someone to cause harm

⇒ 15% were involved in gangs

⇒ 6% were arrested

⇒ 6% had carried a handgun

⇒ 2% stole or tried to steal a vehicle[23]

In FY 2004, there were 6,876 founded cases of child abuse and neglect for a rate of 3.8 cases/1,000 population ages 0-17[24]. Abuse and neglect have been associated with brain damage, aggression, depression, learning disorders, developmental delays, drug use, teen pregnancy, and criminal behavior.[25]

### C. Children with Special Health Care Needs

Children with Special Health Care Needs (CSHCN) represent a specific subset of all children in Virginia. Although they are subject to the same threats to health such as injury and disease as all children, they and their families face specific issues that present additional challenges. CSHCN are defined as those who meet any one of the following conditions:

- Need or use medicine prescribed by a doctor (not vitamins) (80.7% of all CSHCN)

[23] Moore, M, Glaze, A, et al. *2003 Virginia Community Youth Survey*, Center for Public Policy, Virginia Commonwealth University, November 2004.
[24] Number of founded cases/1,000 population ages 0-17, 2003 estimates. Source: *Kids Count.*.
[25] U.S. Department of Health and Human Services. *Child Abuse and Neglect: The National Scope of the Problem.* http://nccanch.acf.hhs.gov/topics/prevention/raising/overview/index.cfm

- Need or use more medical care, mental health, or educational services (43.5% of all CSHCN)
- Have an emotional, developmental, or behavioral problem needing counseling or treatment (27.5% of all CSHCN)
- Limited or prevented in ability to do things (18.3% of all CSHCN)
- Need or get special therapy, such as physical, occupational, or speech therapy (15.4% of all CSHCN)

According to the *National Survey of Children with Special Health Care Needs,* 270,347 Virginia children under age 18 were CSHCN in 2001. This number is 15.3% of all children and adolescents living in Virginia. Approximately 23% of households with children have one or more children with special health care needs. This is slightly higher than the national prevalence of 20%. Approximately 13% of female children and approximately 18% of male children have special health care needs in the state. The prevalence of children with special health care needs is fairly evenly distributed by income level with only a slightly greater percentage at less than 100% FPL. Of the Virginia's CSHCN, nearly a fifth (19.1%) were considered by their parents to have a severe or most severe condition and about eight in ten had mild (38.7%) or moderate (42.2%) conditions. When asked about the impact of health on the child's daily activities, 19.4% of the families reported that their child's health condition greatly affected their ability to perform daily activities. In addition, 14.7% of the CSHCN were absent 11 or more days of school as a result of illness. Other identified impacts on the family include financial problems due to child's health needs (21.4%), families who spend 11 or more hours per week providing and/or coordinating health care for the child (11.3%), and families who have to cut back or stop working in order to provide care (29.2%). Table 27 provides selected results from the National Survey of Children with Special Health Care Needs.

**Table 27. Selected Results from the National Survey of Children with Special Health Care Needs, Children 0-17 Years Old, Virginia and U.S., 2001**

| Prevalence Statistics | | |
|---|---|---|
| **Child-Level Prevalence:** | **State %** | **Nation %** |
| Percent of Children and Youth with Special Health Care Needs, 0 - 17 yrs old | 15.3 | 12.8 |
| **Household-Level Prevalence:** | | |
| Percent of Households with Children that have one or more CYSHCN, 0 - 17 yrs old | 22.8 | 20.0 |
| **Prevalence by Age:** | | |
| Children **0-5** years of age | 9.0 | 7.8 |
| Children **6-11** years of age | 18.3 | 14.6 |
| Children **12-17** years of age | 18.3 | 15.8 |
| **Prevalence by Sex:** | | |
| **Female** | 12.9 | 10.5 |
| **Male** | 17.8 | 15.0 |
| **Prevalence by Poverty Level:** | | |
| **0% - 99%** FPL | 18.4 | 13.6 |
| **100% - 199%** FPL | 14.0 | 13.6 |
| **200% - 399%** FPL | 15.4 | 12.8 |
| **400%** FPL or greater | 15.7 | 13.6 |
| **Prevalence by Race/Ethnicity:** | | |
| **Hispanic** | 6.7 | 8.5 |
| **White** (non-Hispanic) | 17.0 | 14.2 |
| **Black** (non-Hispanic) | 14.0 | 13.0 |
| **Multi-racial** (non-Hispanic) | 19.3 | 15.1 |
| **Asian** (non-Hispanic) | .... | 4.4 |
| **Native American/Alaskan Native** (non-Hispanic) | .... | 16.6 |
| **Native Hawaiian/Pacific Islander** (non-Hispanic) | .... | 9.6 |

Prevalence data only available for States where this minority group makes up at least 5% of total population of children in the State.

| Indicator | | |
|---|---|---|
| **Child Health:** | **State %** | **Nation %** |
| **1)** % of CYSHCN whose health conditions consistently and often greatly affect their daily activities. | 19.4 | 23.2 |
| **2)** % of CYSHCN with 11 or more days of school absences due to illness. | 14.7 | 15.8 |
| **Health Insurance Coverage:** | | |
| **3)** % of CYSHCN without insurance at some point during the past year. | 8.1 | 11.6 |
| **4)** % of CYSHCN currently uninsured. | 3.9 | 5.2 |
| **5)** % of currently insured CYSHCN with coverage that is not adequate. | 29.2 | 33.8 |
| **Access to Care:** | | |
| **6)** % of CYSHCN with 1 or more unmet needs for specific health care services. | 12.1 | 17.7 |
| **7b)** % of CYSHCN whose families needed but did not get all respite care, genetic counseling and/or mental health services. | 26.3 | 23.1 |
| **8)** % of CYSHCN needing specialty care who had problems getting a referral. | 20.1 | 21.9 |
| **9)** % of CYSHCN without a usual source of care (or who rely on the emergency room). | 8.1 | 9.3 |
| **10)** % of CYSHCN without a personal doctor or nurse. | 14.1 | 11.0 |
| **Family-Centered Care:** | | |
| **11)** % of CYSHCN without family-centered care. | 31.1 | 33.2 |
| **Impact on Family:** | | |
| **12)** % of CYSHCN whose families pay $1,000 or more in medical expenses per year. | 9.8 | 11.2 |
| **13)** % of CYSHCN whose families experienced financial problems due to child's health needs. | 21.4 | 20.9 |
| **14)** % of CYSHCN whose families spend 11 or more hours per week providing and/or coordinating health care for child. | 11.3 | 13.5 |
| **15)** % of CYSHCN whose health needs caused family members to cut back or stop working. | 29.2 | 29.8 |

**Source: Child and Adolescent Health Measurement Initiative, *National Survey of Children with Special Health Care Needs: Virginia State Profile,* Retrieved 06/12/05 from http://cshcndata.org/DesktopDefault.aspx**

## III. Direct and Enabling Services

Title V funded direct services offered through local health departments such as prenatal care, family planning, and well child care continue to utilized by a sizable proportion of the maternal population. Services to children with special health care needs are also funded through

Title V and provided through Care Connection for Children and the Child Development Clinics. With the advent of managed care, the health delivery system has been altered and fewer local health departments now provide direct clinical services. Health departments do, however, remain an important safety net for the uninsured and specifically for the undocumented immigrant populations. When the previous Title V needs assessment was completed 31 of the 35 district health departments provided prenatal care. Currently 29 district health departments provide varying levels of prenatal care from pregnancy testing and referral to care up to the delivery. All the local health departments provide immunizations and 24 of the 35 district health departments provide well child services. In addition, nine health departments provide some level of sick child services. Twenty-five of the districts provide clinical dental services. Although some health departments continue to provide well child and sick child services, a number have experienced a reduction of over 50 % in the number of patients seen in the past three years.

For those districts not providing prenatal services beyond pregnancy testing, they serve as a referral mechanism for prenatal care and support services including childbirth education classes, parent education, genetic counseling, mental health services and smoking cessation. The health departments also refer clients to programs providing mentoring and case management such as Healthy Families and the Resource Mothers programs.

Access to services remains highly dependent on insurance coverage. Children and women without insurance are least likely to access early and preventive services. The uninsured are more likely to be minorities, poor, and from single parent families. The proportion of uninsured children has decreased, especially with the recent changes in FAMIS, but the concern for those uninsured remains.

While Virginia has an overall sufficient number of primary, preventive, and specialty service providers, the providers are unevenly distributed throughout the state. Regional differences affect access with Southwest and South Central Virginia, and the Eastern Shore consistently exhibiting provider shortages or other underserved qualifications. The lack of Medicaid providers in some areas is a particular concern.

Cultural competency continues as a critical issue for health systems to meet the needs of growing minority and multicultural populations. Adequately serving Hispanic and other non-English speaking groups has challenged language resources, however, the need to deliver services in culturally appropriate ways also has presented as a crucial focus. All the district

health departments indicate that a number of their clients have limited English proficiency (LEP) and in seven of the districts over half of their clients are LEP clients.

### A. Pregnant Women, Mothers and Infants

Though the guidance directs the state to focus its Title V needs assessment on pregnant and postpartum women, the grant supports a more comprehensive view of women's health across the life span. It is widely recognized that the health of a woman during and after pregnancy, as well as the health of her infant, is heavily influenced by her health status over the years and months prior to conception and pregnancy. A comprehensive assessment of women's and infants' health needs in Virginia has identified the following priority needs for grant support, including improvements in:

- access to appropriate, timely, and coordinated prenatal care;
- identification and treatment of mental health and substance abuse issues among young women;
- access to primary care (including dental care) and prevention services; and
- culturally appropriate outreach to and care of minority women, particularly African-Americans and Hispanics.

In line with developing a comprehensive approach to women's health, the Title V grant has funded a women's health coordinator position, the creation of the Women's Health Virginia 2004 data book and, most recently, focus groups of all seven of the perinatal health councils, focus groups of representative women, and public hearings to learn the concerns of women across the state. This broader perspective recognizes the importance of health at all periods of a woman's life taking into account the inter-relationship between smoking, substance abuse, asthma, diabetes, obesity, violence and depression, for example, and health during pregnancy.

One of the stated goals in the DWIH operational plan for 2004-05 is to identify health indicators that the division will include in a surveillance tool and report on annually. The women's health coordinator, policy analyst, office epidemiology manager and division director plan to collaborate and select indicators to monitor the health of women, identify data needed and develop a framework for making systemic changes in Virginia.

A new national survey of women on their health finds that a substantial percentage of women cannot afford to go to the doctor or get prescriptions filled. According to a news release

regarding the survey, “although a majority of women are in good health and satisfied with their health care, many have health problems and do not get adequate levels of preventive care. For those who are sick, poor, or uninsured, the challenges are magnified.” The Kaiser Family Foundation report, *Women and Health Care: A National Profile*, is based on a national survey of 2,766 women age 18 and older. As health care costs grow, more than one-quarter of non elderly women (27%) and two-thirds of uninsured women (67%) report they delayed or went without care they believed they needed in the past year because they could not afford it, compared to 24% and 59% respectively in 2001. Nearly one in five (17%) with private health coverage delayed or went without care. In addition, 20% of women ages 18 and older reported that they did not fill a prescription in the past year because of the cost.

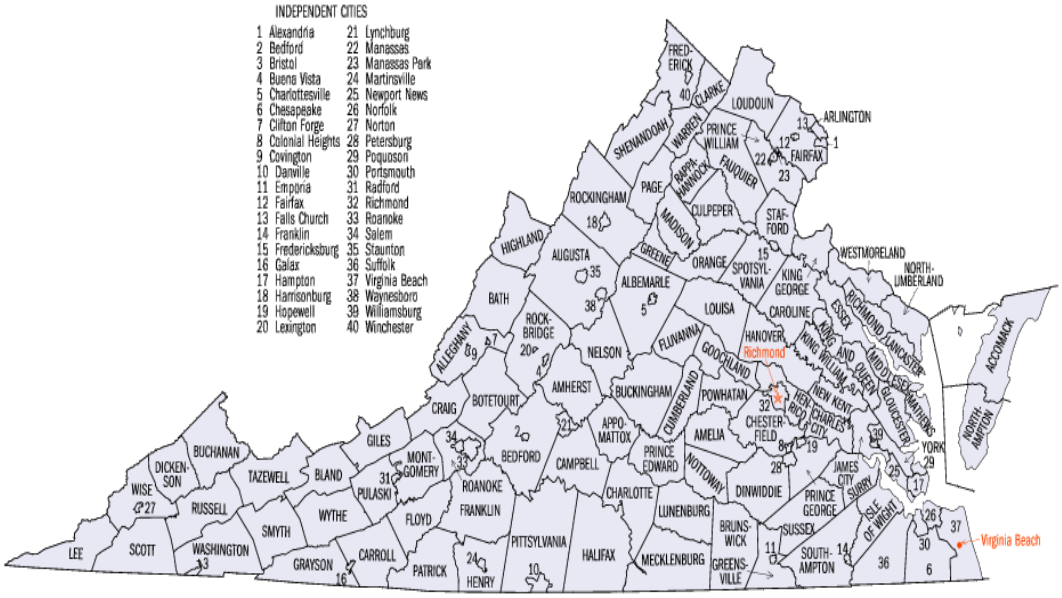
"The growth in health care costs has become a central women’s health issue," said Alina Salganicoff, Vice President and Director of Women’s Health Policy at the Kaiser Family Foundation. "A sizable share of women are falling through the cracks, either because they don’t have insurance or even with insurance can’t afford to pay for medical care or prescription drugs." While statistics specific to Virginia’s women are not available at this time, Virginia’s *Maternal and Child Qualitative Needs Assessment*, supported by Title V funding, found rising health care costs and the impact of these costs on access to care to be a primary concern among the more than one hundred key informants providing input into the assessment. Virginia has actively moved to assess effective ways to address the health needs of all needy women and children through a host of methods, including enhancement of public health care programs and creative outreach in working with communities and providers to meet these needs.

In January 2003, an update to the 1997 Maternal and Child Health Council General Assembly Study; *Improving Access to Perinatal Care in Rural and Underserved Areas,* was published by the staff of the DWIH of the OFHS in cooperation with the state’s regional perinatal councils. First developed by the Maternal and Child Health Perinatal/Early Childhood Subcommittee, perinatal underserved areas constitute localities in need of prenatal health care services resulting from manpower and resource deficiencies. They also include areas where prenatal health care services are underutilized.

According to the 1996-2000 vital statistics data and the 2002 manpower information, there were 55 communities that were considered as perinatal underserved areas. Of those communities, 20 had manpower and resource deficiencies, 44 were underserved because of

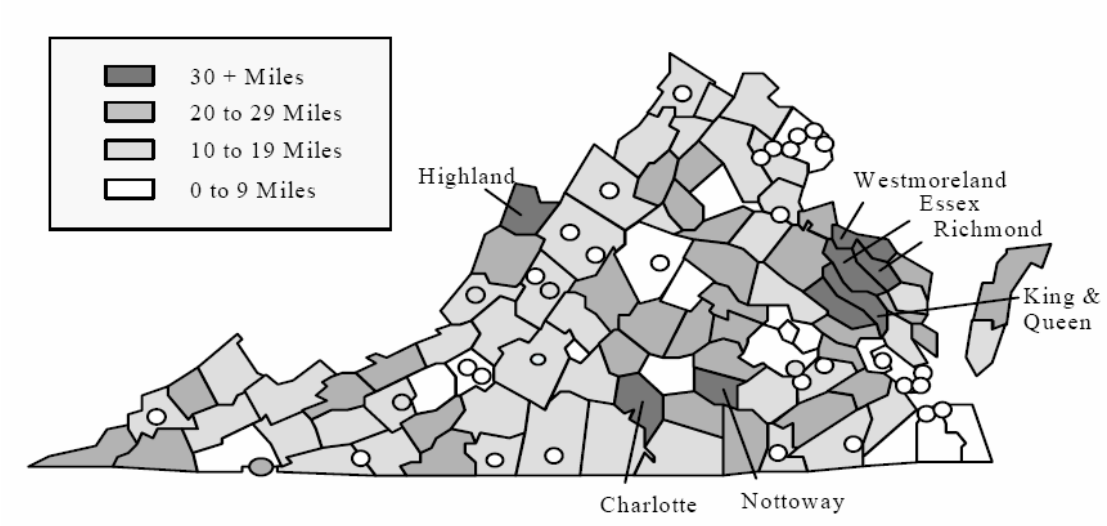
under utilization of health care services, and 9 were underserved in both categories. Five counties (see Figure 35 for a list of Virginia localities), Dickenson, Charlotte, Pittsylvania, Essex, and King and Queen, have been designated as perinatal underserved areas in all three reports for both categories. It is likely others have been added over the two and a half years since this report was published because of more obstetrical service closures in rural areas and the loss of associated physician practices in those areas.

**Figure 35. Virginia Localities**




The Governor's Work Group on Rural Obstetrical Care's report from October 2004 found the following relative to average travel distances for women who delivered in 2002, with most of these designated underserved counties being included in those with particularly long travel distances.

**Figure 36. Avg. Distance Women Traveled to Deliver by Locality, One-Way Trip, Virginia, 2002**




The following are the key findings regarding perinatal health in Virginia included in the January 2003 report:

- Perinatal health is not improving in Virginia and there continues to be some areas where the perinatal population is underserved for both manpower and resource deficiency and under utilization.
- The difficulty experienced in collecting accurate data on prenatal providers underscored the need for a statewide database linked to licensure. While the *Code of Virginia* allows for this type of database, funding has never been available.
- Virginia had an overall adequate number of perinatal providers, but the distribution continued not to be uniform; therefore, shortages exist in certain areas.
- Communities experiencing manpower and resource deficiencies were rural areas, primarily located in the Southwest (Region I), South Central (Region III), and Central Commonwealth (Region VI) Perinatal Regions.
- Obstetricians practicing in Virginia constituted approximately 70.0 percent of the perinatal provider base.
- Utilization of family practice providers had increased the rural areas' perinatal service capacity. At that time, 32 Virginia communities had a family physician that cared for pregnant patients. In 49 rural communities, there was no obstetrician, and in only 7 of those areas was there at least one family physician to serve maternity patients.

- Physicians of all specialties are more likely to practice near population centers. The majority of providers in rural areas include family practice physicians. Recruitment of physicians to the most rural areas still remains a need.
- Mid-level providers, who include nurse practitioners, nurse midwives and physician assistants, constituted 14.8 percent of the state's perinatal clinician base. Mid-level providers showed the widest distribution offering prenatal services in Virginia localities. The two perinatal regions with the highest regional proportion of mid-levels were Central Commonwealth (6) and Eastern Virginia Perinatal Council (7). (There have generally been decreases in the number of practicing mid-level providers since this report due to increased insurance malpractice premiums for obstetrical practices employing mid-level providers and individual practice decisions.)
- Managed care has altered the health department's function in many communities. Health departments may serve primarily as an entry point into care, with patients switching to private providers after securing Medicaid. Utilization patterns of perinatal case management services vary widely by district. The regional perinatal councils and other groups have identified a need for better coordination of care between the private and public sectors, as well as the demand for more support of lay and nurse home visiting services, such as the Resource Mothers Program, CHIP of Virginia and Healthy Families.
- The large number of communities underserved due to under utilization exemplifies that availability is one of multiple factors determining if and when a pregnant women seeks care. Sixty percent of underserved communities due to under utilization had sufficient or excess providers.
- Continuing their role in serving the uninsured and underserved, health departments provided direct prenatal care throughout the state in 31 out of 35 health districts and served approximately 14,000 clients or 15 percent of all resident live births. Health department prenatal care, at some level of intensity, was found in all of the underserved communities.

As a follow-up to this report, in 2004 the Office of Family Health Services surveyed the health districts to determine what services they were providing. This survey found that 29 of the 35 districts provide some level of prenatal care (the level varies from pregnancy testing and referral to actually providing prenatal care up to 36 weeks of pregnancy). Prenatal care is not a mandated service and as local health department resources no longer had adequate resources to

maintain all of the services provided, they were forced to focus available resources on mandated services and rely on other community-based organizations to provide these services. Generally, prenatal care delivered through local health departments has been viewed as being particularly effective in meeting the needs of vulnerable populations and there is support for improving the availability of resources to local health departments for pre and postnatal services, particularly those with a large percentage of low-income, minority, or otherwise "at risk" populations.

Prenatal care may be more difficult to obtain due to confusion on the part of women about where to go for services. The Virginia perinatal system of care has been undergoing transformation in recent years as the state-initiated Medicaid managed care was phased in across the state. Whereas prenatal services for low-income women previously were provided by local health districts, with routine home visiting by nurses and follow-up in family planning clinics, WIC and well-child clinics, care is now largely conducted by private physicians, many of whom are unfamiliar with these patients' needs, culture and community resources. Collaboration between governmental agencies (health, social service, mental health, education, Medicaid) and private providers is uneven across the state.

In addition, Virginia has been undergoing a crisis as many rural hospitals are closing their obstetrical services and providers are discontinuing obstetrical care to all women and/or only women with Medicaid or no coverage due to liability premiums rising and Medicaid reimbursement staying stagnant until this year. These developments have directly affected the ability of women to gain early entry into prenatal care and the time home visiting program staff have to spend helping with transportation so that pregnant women get access to care. The lack of locally available prenatal care has also negatively affected the adequacy of prenatal care because of the long distances women and families have to drive and the time off from work involved to go to prenatal appointments.

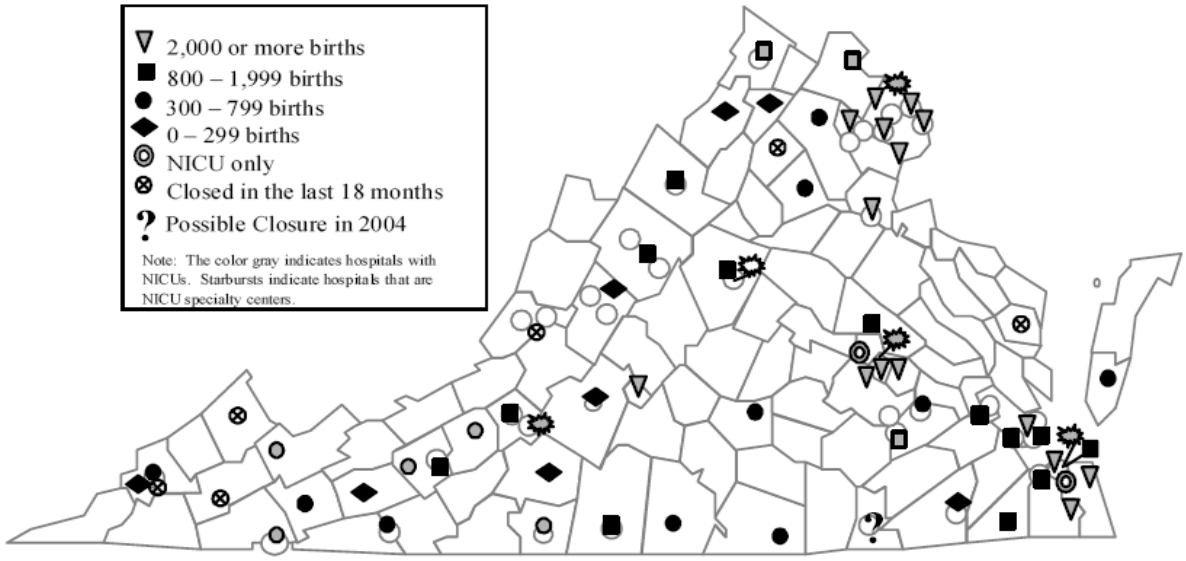
Unlike the 1980's crisis in Virginia which involved the availability of medical malpractice insurance, the current crisis in obstetrical care is in large measure a result of issues related to *affordability* of remaining in practice, in particular, higher medical malpractice premiums, increasing numbers of Medicaid and uninsured patients, and inadequate Medicaid reimbursement. Of the nearly 100,000 babies born each year in Virginia, between 35 and 40 percent are enrolled in Medicaid or FAMIS (Family Access to Medical Insurance Security – the Commonwealth's child health insurance program).

In the last 21 months, several sole community hospitals in Virginia have discontinued their obstetrical services and now deliver babies only in their emergency rooms when a woman presents with delivery being imminent:

- Bon Secours St. Mary's Hospital, Norton (November 2003)
- Russell County Medical Center, Lebanon (November 2003)
- Rappahannock General Hospital, Kilmarnock (March 2004)
- Alleghany Regional Hospital, Low Moor (April 2004)
- Buchanan General Hospital, Grundy (July 2004)
- Southern Virginia Regional Medical Center, Emporia (January 2005; "?" on map)

The following map illustrates Virginia's hospital OB services based on 2002 birth data:

**Figure 37. Virginia Hospitals with Obstetrical Services**




Note: Between 800 and 1,999 births occurred at the University of Virginia Health System in Charlottesville.
Source: Virginia Hospital and Healthcare Association

The Governor's Work Group issued an interim report on July 1, 2004. Based on recommendations in that report, the Governor provided emergency authority and funding, effective September 1, 2004, for the Department of Medical Assistance Services (DMAS) to increase the Medicaid payment rates for outpatient Obstetrical and Gynecological services by 34 percent through the emergency regulation process. It is unclear yet what impact the increased fees will have on access to OB care for low-income pregnant women. The final work group

offers 27 recommendations across six policy areas including eligibility for services, reimbursement levels, medical malpractice, license/scope of practice, birth injury, and improving access to care.

The first recommendation of the Work Group involved expansion of FAMIS to pregnant women with family incomes above the 133% of the federal poverty level (FPL) currently covered under Medicaid and to revamp the premium assistance program for FAMIS SELECT. The Virginia General Assembly approved the addition of the two new programs to FAMIS during the 2005 State legislation session. A notice from the Center for Medicare and Medicaid services was received that approved these additions. Effective August 1, 2005, FAMIS will add coverage for adult pregnant women through the new FAMIS MOMS program. Second, the current FAMIS premium assistance program called Employer Sponsored Health Insurance (ESHI) will be redesigned, and the program name will be changed to FAMIS Select**.**

FAMIS MOMS expands this coverage to include pregnant women with family income greater than 133% and less than or equal to 150% of the FPL. Pregnant women eligible for this program will:

- Have a gross family income greater than 133% and less than or equal to 150% of the FPL; and
- Not have credible health insurance coverage under a private or employer-sponsored group or individual health insurance plan; and
- Not have access to the State Employee Health Plan; and
- Be a resident of the Commonwealth of Virginia; and
- Be a U.S. citizen or a qualified legal immigrant; and
- Have a medically confirmed pregnancy or be within the 60-day postpartum period.

FAMIS MOMS will provide enrollees the same coverage that pregnant women currently receive from the Virginia Medicaid program. There will be no differences in covered services, service limitations, and pre-authorization requirements. FAMIS MOMS will use the same system (fee-for-service and MCOs) as Virginia Medicaid. There is one important difference between Medicaid and FAMIS MOMS. Once the baby is born, the child will not automatically be enrolled in FAMIS. The mother must apply for the baby's coverage following the birth for the delivery to be covered.

Currently, the FAMIS ESHI program provides partial payments for health insurance premiums for families with access to health insurance through their employer. ESHI will be replaced by FAMIS Select as of August 1, 2005, and will give the families of FAMIS-eligible children the opportunity to choose between coverage under FAMIS and coverage through their private or employer-sponsored health plan. Children enrolled in FAMIS Select will access health services through their private or employer-sponsored health plan and will present the identification card of that plan for payment. Children enrolled in FAMIS Select will not have access to direct FAMIS coverage except if needed to cover childhood immunizations. Key to getting eligible women enrolled, DMAS has a successful enrollment/application process that is fondly called the "no wrong door" process. This allows an applicant to use either DMAS' Central Processing Unit (CPU) or DSS in order to file an application for Medicaid or FAMIS. The process is streamlined so that applications are completed in 10 days.

Recommendations # 23 through #27 of the report all deal with improving access to care. These recommendations, with all involving VDH, include:

- increasing State general funds available for loan repayment of obstetricians that agree to practice in OB physician shortage areas;
- supporting the use of telemedicine to access university-based and other clinic perinatal services;
- increasing State funding of local health departments' pre and post-natal care in underserved areas and eliminate the requirement of a local matching of funds;
- implementing statewide outreach/education/public awareness with culturally and linguistically appropriate materials, including options for prenatal care, birth choices, breastfeeding, and the importance of dental care for pregnant women and training of health care providers regarding cultural competence;
- working with the Board of Dentistry to establish a statewide outreach program;
- encouraging non-English speaking patients to speak English through identification and use of community learning opportunities; and
- appropriating state funds to study the feasibility of statewide human services transportation programs.

At the request of the Governor, VDH has provided leadership on a direct service project called the New Parent Kit. This is part of the Governor's Initiative to promote lifelong education for children and to support families. He stated that all parents, regardless of income, should receive a kit from the State when their baby is born. VDH worked with VDSS for a year and a half to develop this kit, which is based on the Bright Futures concepts and has information on perinatal depression and community resources as part of the "Caring for Yourself" section. The kit was presented to focus groups around the state and is currently being distributed in pilot sites. Distribution of these kits, funded by private foundations and public funds, began in June 2004 through the home visiting and hospital network established in all 135 localities to all new parents (approximately 100,000 English kits and 10,000 Spanish kits). Another part of the initiative is the 1-866-KIDS-TLC line that a parent can call to get information about medical insurance, child care, information and referral (an MCH help line) and supportive services. A person answers the support line 16 hours a day, 7 days a week. The line is advertised on the kit and will be advertised by posters in physician's offices.

In addition to these more recent enhancements of pre and post-natal services for low-income women, the Virginia Department of Medical Assistance (Medicaid-DMAS) implemented the Family Planning Waiver October 1, 2002. The purpose of this waiver is to extend family planning services for up to 24 months following the end of pregnancy for women who received a Medicaid-funded, pregnancy-related service during their most recent pregnancy. The women are automatically eligible for the waiver at the end of their Medicaid coverage. They must remain income eligible for the entire 24 months. The waiver provides coverage for only the following services: annual gynecological exams; family planning education and counseling; over-the-counter birth control supplies and prescription birth control supplies approved by the FDA; sterilization (excluding hysterectomies) and the required hospitalization and; testing for sexually transmitted diseases during the first family planning visit. Treatments for medical conditions or services not related to family planning or existing prior to and/or discovered during a visit to the provider for family planning are not covered under the Family Planning Waiver. To date over 6,000 women have utilized the Family Planning Waiver services. The waiver is due for renewal in 2007.

Many high-risk women rely on subsidized services such as publicly funded family planning clinics for free or low-cost contraceptives because they are low income or are teenagers. In Virginia in 2002, 841,080 women needed contraceptive services and supplies. Of these, 386,690, or 46 percent, were also in need of publicly supported contraceptive services and supplies. Virginia ranked near the bottom of the states in its availability of contraceptive services. (*Alan Guttmacher Institute, http://guttmacher.org/pubs/state_data/states/virginia.html, Contraception Counts-State of Virginia, 2002*) It is anticipated that the Family Planning Waiver has impacted the State's declines in the number of induced terminations and teenage pregnancies.

Over the past decade, VDH staff worked closely with the March of Dimes (MOD), an active advocate for women and infants. Last year DWIH participated in preparing for a press conference on prematurity. The Virginia MOD Prematurity Campaign kicked off in June 2004. Publicity materials described the relationship of the pregnant woman's risk factors (depression, stress, domestic violence, anxiety) to prematurity or low birth weight. The MOD has also worked closely with VHSI and home visiting programs.

The goal of the Virginia Healthy Start Initiative (VHSI) is to reduce health disparities within the African American population in four local sites in order to reduce infant mortality and low birth weight. Virginia has five Healthy Start communities, four of which are managed by VDH and one by the local Richmond City Health Department. VHSI currently provides services in the cities of Petersburg, Norfolk and Portsmouth, and the County of Westmoreland. It is managed by the VDH. This allows for strong linkages with Title V services in local health departments, through the regional perinatal councils in Virginia, and with the Virginia Resource Mothers Program. The VHSI provides five core services to its clients, which include outreach and client recruitment, case management, health education, interconceptional care and perinatal depression screening and referral.

A PRAMS study, conducted from 2000-2002 in Richmond and Norfolk reported high proportions of African American women with self-reporting depression. A large percentage of African American women in both cities stated that they did not want to be pregnant (76.5% in Norfolk and 66.9% in Richmond) and did not have health insurance (62% in Richmond and 66% in Norfolk). Another significant statistic reported in both localities was that over 75 percent of the respondents had at least one medical complication during their pregnancy. Statewide,

hypertension and diabetes are significant problems for all races, followed by eclampsia and heart disease. (Virginia Commonwealth University PRAMS Report, 2002) State rates may be much lower than Healthy Start because Healthy Start clients are at higher risk than the general population for many of the life stressors that can be precursors to perinatal depression. Once a referral is made, the VHSI worker follows up to be sure the appointments are made and kept. As a result of this VHSI experience, the Resource Mothers Program home visitors statewide (79 localities) have also been trained to conduct the Edinburgh Postnatal Depression Scale and to refer for further assessment. (VHSI Annual Data Report, 2004)

VDH has contracted with a national policy research firm to explore optional program designs for the case management services for high-risk pregnant women and infants (BabyCare) and will be discussing these options with stakeholders and DMAS. BabyCare has not been redesigned to reflect changes that have resulted from the recent DMAS contracting for the managed care services across most of the state.

The Virginia Center for Health Outreach (VCHO) at James Madison University promotes education and policy initiatives to support the development of community health workers (CHWs). In regional networking meetings, the CHWs had expressed a need for training on working with clients with mental health needs. VCHO, in partnership with the major Virginia perinatal home visiting programs (Resource Mothers, Healthy Families and CHIP), is currently piloting a 6-module training seminar for community health workers on mental health screening, referral, and follow-up. Increased CHW knowledge and skills will increase the multicultural community-level network-serving women with perinatal mental health needs. The Virginia Rural Health Association (VRHA) offers collaboration, policy analysis and training for Community Health Care Centers and local health departments. This organization is supported through efforts of the VDH Health Policy Office. In the VRHA's most recent strategic plan, the use of community health workers is mentioned as well as the paucity of mental health resources.

In 2004, 25.8% of VHSI program participants screened for perinatal depression had a positive score on the Edinburgh Postnatal Depression Scale. Nationally 24% of women experience depression (Healthy People 2010), which is supported by the recent Kaiser publication, *Women and Health Care (July 2005)*, one in four women (23%) reported they have been diagnosed with depression or anxiety, over twice the rate for men (11%). Home visitors and nutritionists have been trained to use the EPDS at enrollment, late in the pregnancy,

postpartum, at the postpartum checkup and at program exit to identify women in need of referral for mental health assessment. Since February 2003, the VHSI staff has entered the scores into the VHSI data collection tool. While expecting to find between 15 to 20 percent screening positive, these four sites were surprised to find 28% of the women screened indicating a need for further assessment.

VDH has worked with DMHMRSAS and the Department of Social Services (DSS) for over eight years to improve access and knowledge by clients and providers to services for pregnant women who are using substances. Although DMAS has not convened the interagency group PICS (Pregnant women, Infants, and Children with Special Needs group) for a year, VDH and DMHMRSAS have networked to apply for three grants that would increase provider knowledge in the area of substance abuse and treatment of pregnant women, increase access to mental health services, and improve provider awareness of mental health as a factor in overall maternal and child health (Bright Futures training module).

The VDH received a $250,000 grant in September 2004 from the U.S. Human Resources and Services Administration to alleviate perinatal depression, which affects pregnant women and new mothers up to one year after pregnancy. The grant will help to train health providers on a statewide basis and give them the tools to identify depression in pregnant women and new mothers and refer them for treatment. In a partnership with the University of Virginia, the Eastern Virginia Medical School, and the Regional Perinatal Councils launched a project called *The 3 Ps of Perinatal Depression: Perinatal Health, Provider Education and Public Awareness*. The project includes the development of a Web-based curriculum to enable providers to identify depressed women and refer them to treatment. The curriculum incorporates the findings of a survey on provider's knowledge, attitudes and practices. It also includes the findings of consumer research on the ways culture and race affects the ability of women to seek and obtain treatment. Providers will be able to obtain continuing education credits for completing the training.

An expert panel of 46 members, including public and private providers, state agencies and consumer representatives, is providing input on:

- The content of the curriculum and how to market it to providers,
- Ways to increase the capacity of the health care system to identify and treat perinatal patients, and

- Identify existing and additional resources needed to create a coordinated system of care.

The project director is working with HRSA and the Office of the Surgeon General on designing a national campaign to educate consumers and providers about perinatal depression. The Virginia project received state and national coverage in the press. The web site address will be www.perinataldepression.org.

There have been several other initiatives that have begun relatively recently to address issues that impact mental health and/or substance abuse. As part of the Governor's New Parent Kit, VDH collaborated with the Family Mental Health Foundation (FMH) to redesign their "If you're not happy…" brochure on perinatal depression so that it was at a lower reading level, based on the EPDS, and provided specific action steps for the target audience. VDH contracted with a translation organization for the Spanish version. VDH and FMH agreed that the redesign benefited both parties, as VDH could utilize the photos and concepts, which were so appealing and FMH could accomplish their planned redesign and translation at no cost. The final brochure carries both logos. VDH purchased the brochure from the FMH printer in order to provide the copies for the Governor's New Parent Kit.

The Governor's Substance Abuse Services Council developed a plan and presented it to the General Assembly to increase the capacity of primary care physicians and prenatal care providers to identify substance use disorders and refer patients for substance abuse treatment services. In addition to the action steps with the Free Clinics and the Community Health Centers, a partnership project with VDH was listed in the report is "to explore development of a screening tool to detect substance abuse so local health departments can refer patients to treatment."

Other recommendations in the legislative report reference that the DMHMRSAS, DSS, and the Virginia Supreme Court received a grant from the National Center for Substance Abuse and Child Welfare with the goal of improving substance abuse assessment and treatment system outcomes. In the process of developing their five-year plan, the planning group identified the need to include VDH and health systems in any training provided. DMHMRSAS has already collaborated with VDH to publicize provider training offered by the regional perinatal councils on the state requirements for reporting substance abuse, how to identify and treat substance abuse and refer them to local community resources. In the future, DMHMRSAS plans to collaborate with VDH to increase awareness of the need for substance abuse identification and

treatment during meetings and training offered by health care provider associations and consumers.

In 2003, VDH conducted the *WIC Breastfeeding Multi-Ethnic Survey* to identify social and cultural contexts that influence breastfeeding behavior among the culturally diverse mothers served by WIC. Postpartum depression (PPD) was included as a factor influencing breastfeeding in the WIC populations, especially since it is a treatable condition that may be a significant barrier to healthy mother-child interactions. (*VDH WIC Breastfeeding Multi-Ethnic Survey, 2003*) More than 1,800 mothers with infants under 12 months of age completed the survey, which included the EPDS. Approximately 13.8% of new mothers exhibited symptoms of PPD, 18.6% of PPD sufferers had pregnancy complications, and 19.9% of PPD sufferers having low birth weight infants. All WIC mothers are more vulnerable to PPD and breastfeeding appears to lower the rate of PPD among WIC mothers. Thus, the study recommended WIC mothers with PPD, an already vulnerable population, should take priority in receiving enhanced support services and referral for treatment in the future.

The VDH Center for Violence and Injury Prevention studied the services for victims of domestic violence and issued a report in the winter of 2004. The findings indicate the need for more provider training to recognize intimate partner violence and depression. A staff person was hired to implement the study recommendations. The Virginia Department of Social Services (DSS), with the support of the state's Attorney General, held regional forums on domestic violence identification and community resources. Some of the service gaps and recommendations are related to perinatal health of women.

A 2004 report on the progress of the implementation of the *Virginia Sexual Violence State Plan* was issued in June 2005. The Sexual Violence State Plan Advisory Board was established in 2003 to bring together sexual violence stakeholders and develop a statewide plan for sexual violence prevention programming in Virginia. The board is made up of 21 members currently, including the VDH, guiding Virginia's implementation of the State Plan. The five goals of this State Plan are:

Sexual violence prevention and intervention services receive adequate funding and resources.

- Data are used to improve sexual violence prevention and intervention.
- Comprehensive sexual violence services are accessible in every Virginia community.

- Effective and comprehensive sexual violence prevention strategies are implemented across Virginia.
- Public policies are reformed to respond effectively to sexual violence through prevention and intervention.

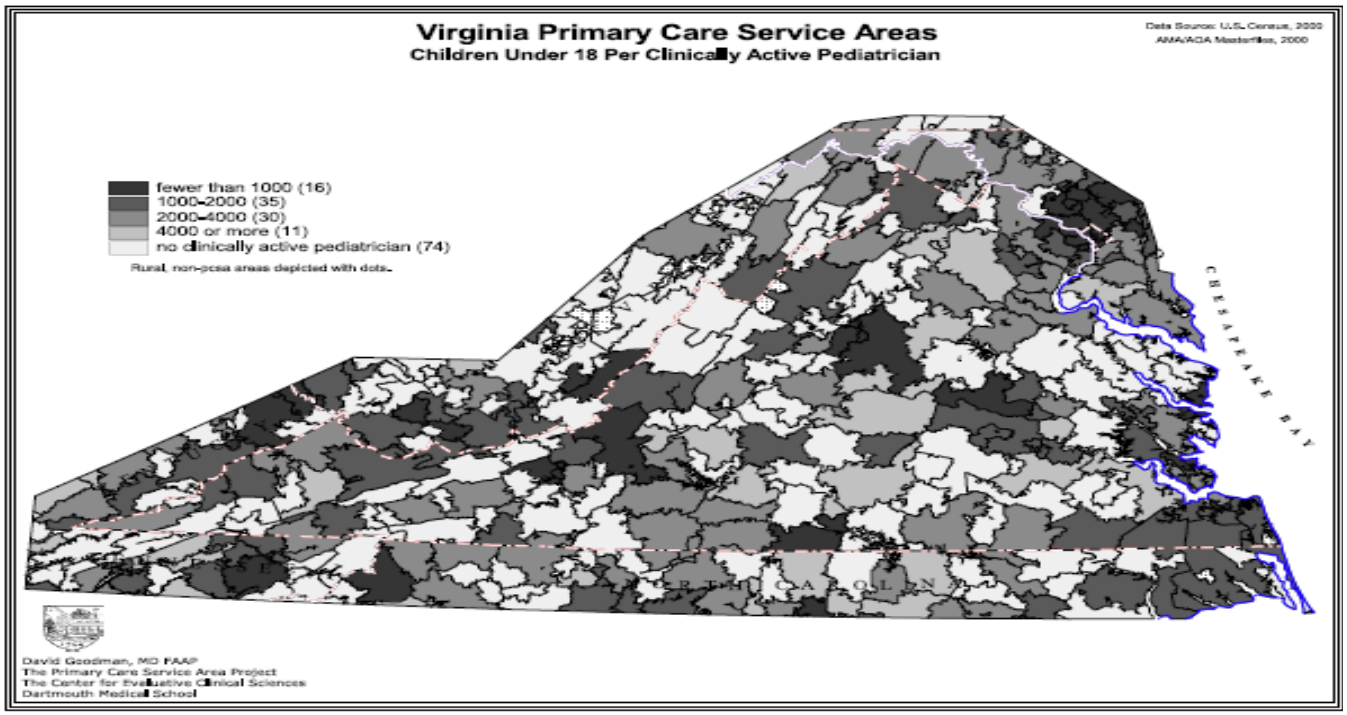
In addition to prevention of sexual violence, another high priority need is prevention of HIV among black women. Within the VHSI sites, HIV disease is increasing in prevalence in the city of Petersburg. Healthy Start staff are working to establish a collaborative relationship with the SISTA program (Sisters Informing Sisters About Topics on AIDS) which is managed by its community consortium, CHASE (Crater HIV/AIDS Services and Education), both of which work to educate the community about HIV. VHSI staff will be involved with SISTA program staff in reaching out to women in that community who are at risk for HIV. In the Norfolk and Portsmouth communities, the Eastern Regional AIDS Resource and Consultation Center leads community efforts to educate and treat persons with HIV disease. Healthy Start staff have access to training programs and educational materials that the center provides to share with program and community participants.

## B. Children

### Availability of Direct Health Services

Pediatricians, as shown in Figure 38, practice in all areas of the Commonwealth, but are primarily concentrated in urban areas. Areas that are particularly sparse include the northwest, the northern neck, and along the North Carolina border, west of Hampton Roads. Unfortunately, this map does not convey the extent of access to pediatricians by children living in low-income families or the availability of other pediatric providers, such as pediatric nurse practitioners.

**Figure 38. Children under 18 per Clinically Active Pediatricians by Primary Care Service Areas, Virginia, 2000**




An additional measure of the access to pediatric health care providers are areas that qualify as medically underserved (MUA) or health professional shortage areas (HPSAs) (see Figures 39 and 40), which are concentrated in the Southwest, Southside, Northern Neck, Eastern shore, and Western Virginia.

**Figure 39. Medically Underserved Areas, Virginia, 2002**

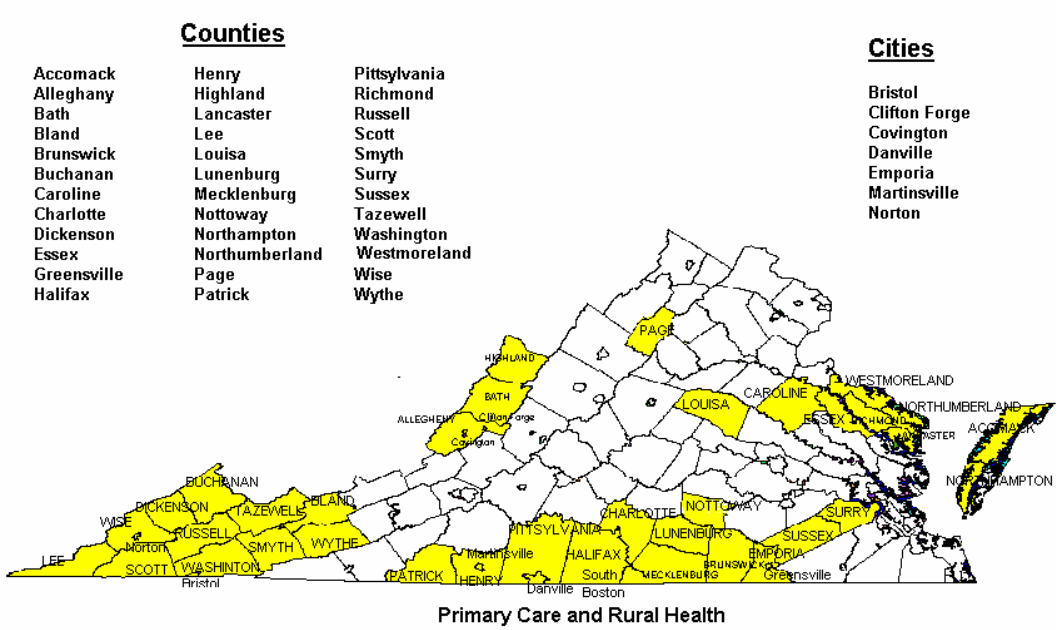
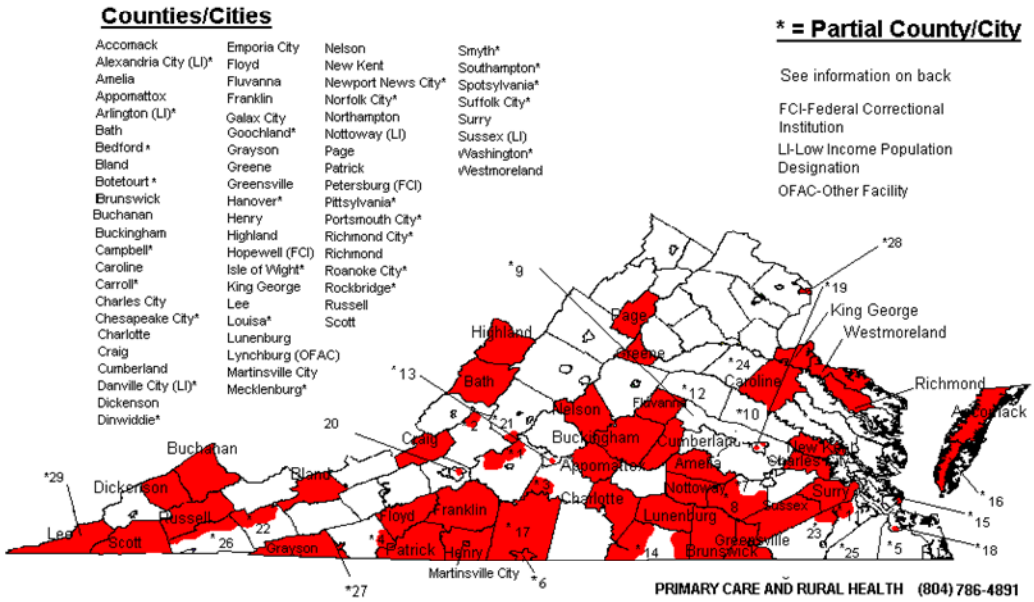



**Figure 40. Health Professional Shortage Areas, Virginia, 2003**




Dental Health

Since 1921, the Commonwealth of Virginia has recognized the need for access to care for underserved populations through the establishment of a Division of Dental Health and through local health department dental programs. Although the number of local dental programs has declined in recent years due to budgetary constraints, VDH has dentists providing

comprehensive dental care in fixed and mobile clinics in half of the state's cities and counties. Last year as a result of their work, 37,000 low-income children received dental services valued at more than 10 million dollars including exams, cleanings, preventive dental sealants, fillings and extractions. In spite of the current safety net that exists and of the state's long and successful dental public health history, Virginia continues to face numerous challenges to improving disease outcomes and access to preventive and treatment oral health services for underserved children and their families.

One of the current challenges is access to providers especially for individuals in underserved communities and those individuals receiving Medicaid dental services. Virginia has more than 6.7 million citizens with 696,205 individuals at the poverty level. In 2004, nearly 400,000 children qualified for the free or reduced lunch program at school, an indication of low-income status. The Department of Medical Assistance Services (DMAS) estimates that a total of 380,000 children under age 21 were eligible for dental benefits and that approximately 23% of eligible children received at least one dental visit last year. Additionally, the total statewide enrollment in Family Access to Medical Insurance Security (FAMIS) is 73,000 and these children are also eligible for dental services through Medicaid dental providers.

The dentist to population ratio in Virginia approximates the national average with one dentist to 2,085 citizens (Figure 42). However, 90 cities and counties have ratios greater than this figure that qualify as dental areas of need and 39 areas qualify as dental Health Professions Shortage Areas.

**Figure 41. Number of Dentists in Virginia by Zip Code, 2003**

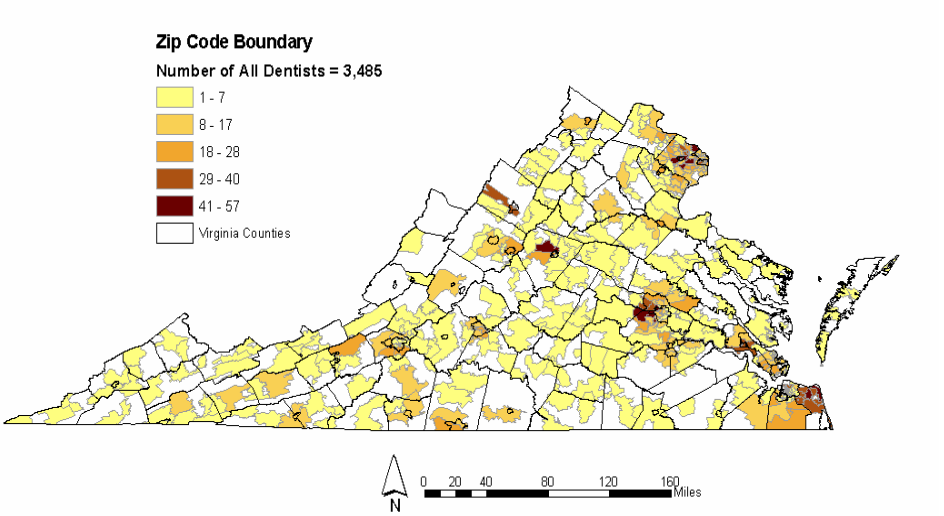
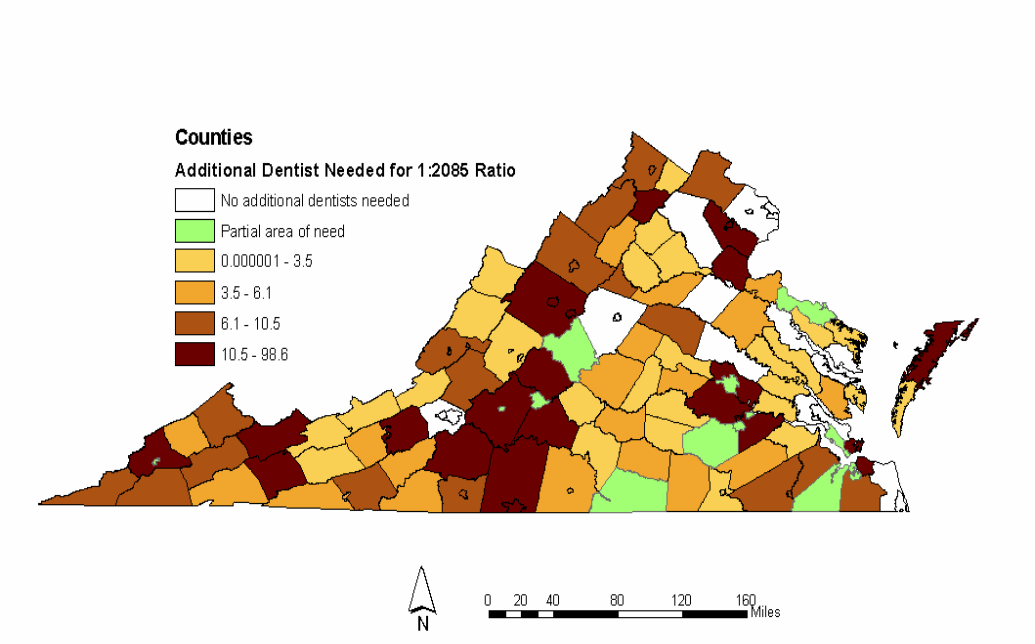



**Figure 42. Dental Areas in Need, Virginia, 2003.**



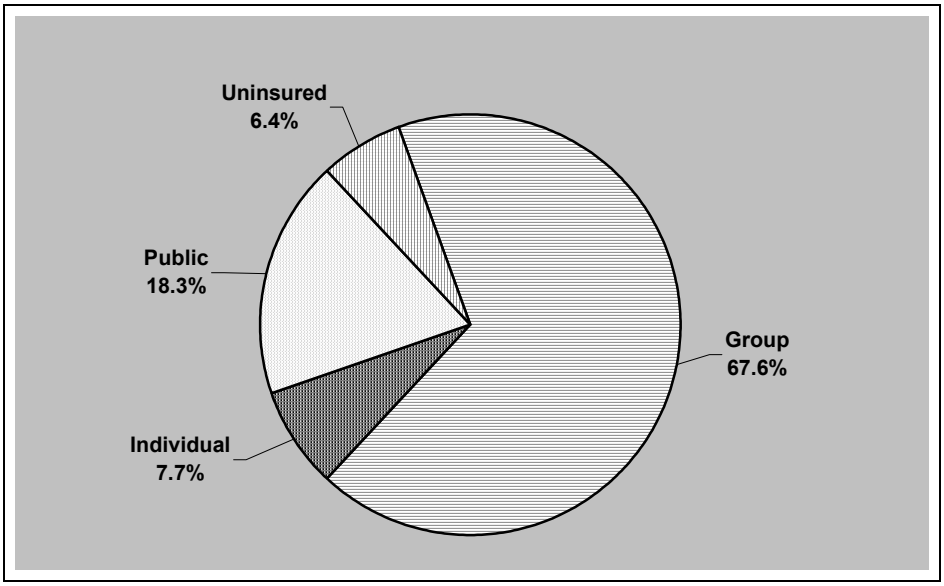
Since 1952, the Dental Scholarship Program has been providing financial incentives for students at Virginia Commonwealth University School of Dentistry to serve in areas of need. In 2000 the Dentist Loan Repayment Program was added without additional funding. This year, the 2005 General Assembly supported the dental program through allocation of $325,000 to fund both of these programs to increase dentists in underserved areas of the state. As of FY2006 the Division of Dental Health will begin to administer the Dentist Loan Repayment Program. Additional General Fund dollars were also allocated to improve the aging physical infrastructure of dental clinics and increase salaries of public health dentists. This follows the legislation enacted in the 2004 General Assembly that improved practice laws allowing for general supervision of dental hygienists and temporary licensure laws for volunteer dentists. As a result, long-term plans for new facilities and models are being developed taking into consideration current and future plans from other dental safety net providers.

**Access to Health Services**

In Virginia, 12.5% of the population was uninsured in 2001-2003, significantly lower than the U.S. as a whole (15.1%).[26] The National Survey of Children's Health (2003) found 7.3% of children under age eighteen were uninsured and that 12.2% had not been insured at some point in the past year. A 2004 survey estimated that 8.9%[27] of or 639,618 Virginia residents were uninsured; among children ages 0-18, 6.4% were uninsured, in contrast to adults ages 19-64, with a rate of 11.4%.[28] The sources of insurance are indicated in Figure 47.

[26] DeNavas-Walt, C., Proctor, B., and Mills, R., U.s. Census Bureau, Current Population Reports, P60-226, *Income, Poverty, and Health Insurance Coverage in the United States: 2003,* U.S. Government Printing Office, Washington, DC, 2004.
[27] Estimates from this source are point-in-time estimates.
[28] State Health Access Data Assistance Center, University of Minnesota. *2004 Virginia Health Care Insurance and Access Survey: Select Results.* Draft report. March 2005.

**Figure 43. Sources of Health Insurance in Virginia, 2004 (Children 0-18 years)**




**Total weighted count = 1,879,151**
**Source: State Health Access Data Assistance Center, University of Minnesota. *2004 Virginia Health Care Insurance and Access Survey: Select Results.* Draft report. March 2005.**

While relatively few children 0-18 are uninsured, a staggering proportion, one-fourth of 19-24 year olds, were found to be uninsured in 2001. Overall, population groups in Virginia with a high percentage of uninsured are:[29]

- Income between 134-150% of poverty – *28.8%*
- Hispanic – *27.4%*
- 19-24 year olds – *25.5*
- Less than a high school education – *23.4%*
- Native American – *22.3%*
- Separated marital status – *21.7%*
- Income less than 100% of poverty – *20.3%*
- Income between 101-133% of poverty – *19.0%*

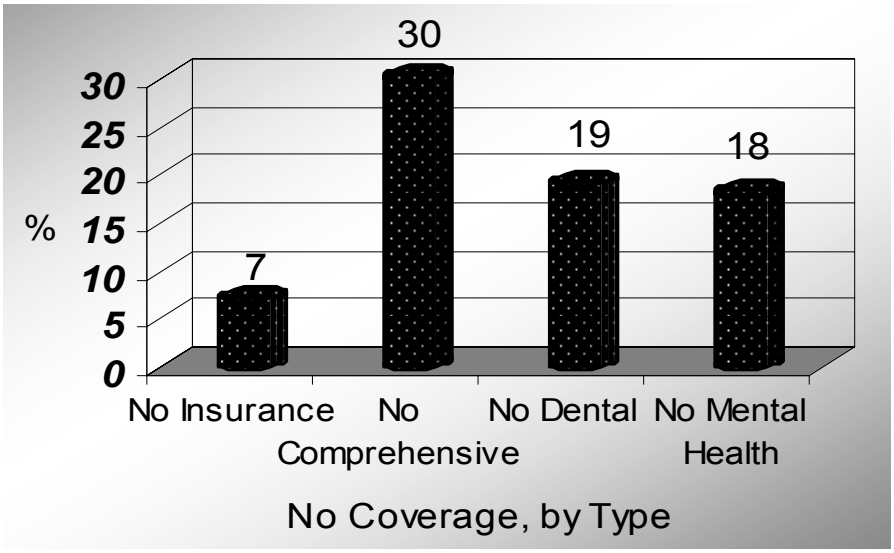
[29] Ellis, J., Adler, J., Sarkar, M., *Results from the 2001 Virginia Children's Health Access Survey,* The Survey and Evaluation Research Laboratory, Center for Public Policy, Virginia Commonwealth University, August 2002.

In 2001, most children (93%) were covered by some form of health insurance, but:

- 70% had comprehensive coverage including dental
- 21% had basic coverage for hospitalization and doctor's visits
- 2% had specialty coverage only[30]

When parents were asked about specific areas of health insurance coverage, 81% and 82% reported having coverage for dental and mental health services, respectively. Figure 48 summarizes the percentages of children with no insurance, by specific insurance category. The most common reason cited for being uninsured was cost – 49% of parents stated that they could not afford health insurance.[31]

**Figure 44 Percent of Children with No Insurance, by Insurance Type, Virginia, 2001**




**Source: Ellis, J., Adler, J., Sarkar, M., *Results from the 2001 Virginia Children's Health Access Survey,* The Survey and Evaluation Research Laboratory, Center for Public Policy, Virginia Commonwealth University, August 2002.**

[30] Ellis, J., Adler, J., Sarkar, M., *Results from the 2001 Virginia Children's Health Access Survey,* The Survey and Evaluation Research Laboratory, Center for Public Policy, Virginia Commonwealth University, August 2002.

[31] Ellis, J., Adler, J., Sarkar, M., *Results from the 2001 Virginia Children's Health Access Survey,* The Survey and Evaluation Research Laboratory, Center for Public Policy, Virginia Commonwealth University, August 2002.

Public Insurance

Three public programs (other than coverage through the military) are available to insure eligible low income children in Virginia:

- Medicaid (called FAMIS Plus) for children in families at or below 133% of poverty
- Medicaid expansion, for children above the poverty level but at or below 133% of the poverty level, and
- FAMIS, for children under 19 years of age living in families with incomes at or less than 200% of poverty and greater than 133% of poverty

As of May 2005, over 414,000 children were enrolled in one of the three programs. Estimated number of children eligible for the three programs are 432,773, or 96% of estimated eligibles in the state are enrolled (see Table 28).

**Table 28. Enrollment in Medicaid and CHIP Programs, as of May 2, 2005**

| PROGRAM | INCOME LEVEL | NUMBER ENROLLED | % OF TOTAL ENROLLMENT |
|---|---|---|---|
| FAMIS Children < 19 Years | > 133%, ≤ 200% of poverty level | 41,141 | 10% |
| MEDICAID Expansion Children < 19 Years | > 100%, ≤ 133% of poverty level | 30,833 | 7% |
| FAMIS Plus Children < 21 Years | ≤ 133% of poverty level | 342,264 | 83% |
| **Total** | | 414,238 | 100% |

**Source: Department of Medical Assistance Services, *April 2005 CHIP Enrollment Report.* Retrieved on 06/12/05 from http://www.famis.org/English/reports/EnrollmentReport04-05.htm**

The 2004 survey of health insurance in Virginia included information on Virginians who are potentially eligible for public coverage programs but remain uninsured. Table 29 shows three subpopulations that were eligible for public coverage by their insurance status. Survey results suggest that a majority of children who were eligible for public programs were covered by public insurance. The largest group that appeared to be eligible for Medicaid but was not enrolled consists of individuals who lived in low-income families with dependent children.

**Table 29. Health Insurance Status of Individuals Who Are Potentially Eligible for Public Programs, Virginia 2004***

| Eligibility Group | Insurance Type | | | Weighted count |
|---|---|---|---|---|
| | Private | Public | Uninsured | |
| *FAMIS PLUS – MEDICAID*<br>Children Under 19 Years in Households with Income <=133% FPL | 28.8% | 63.5% | 7.7% | 89,096 |
| *MEDICAID*<br>Individuals Who Live in Low-income** Families with Dependent Children | 28.4% | 49.5% | 22.1% | 230,351 |
| *FAMIS – CHILDREN'S HEALTH INSURANCE PROGRAM*<br>Children Under 19 Years in Households with Income <=200% FPL | 25.9% | 64.9% | 9.2% | 167,372 |

***Eligibility categories are not mutually exclusive.**
****Low-income families with dependent children (LIFC) are eligible for Medicaid based on 185% of the Standards of Need requirements defined by geographic region by the Virginia Department of Health.**
**Source: State Health Access Data Assistance Center, University of Minnesota. *2004 Virginia Health Care Insurance and Access Survey: Select Results.* Draft report. March 2005.**

Uninsured respondents were asked whether they had ever requested or been given information about one of Virginia's public health programs, such as Medicaid. A majority (65.4%) of the uninsured had neither requested nor received information about Virginia's public health insurance programs. The survey results also show that most of the uninsured (87.7%) would be willing to enroll in a public coverage program, therefore, increasing awareness of public programs for the uninsured may increase enrollment.[32]

[32] State Health Access Data Assistance Center, University of Minnesota. *2004 Virginia Health Care Insurance and Access Survey: Select Results.* Draft report. March 2005.

**Table 30. Knowledge of and Interest in Public Coverage among the Uninsured, Virginia 2004**

| | Yes | No | Weighted Count |
|---|---|---|---|
| Have Requested or Received Information about Public Programs | 34.6% | 65.4% | 581,887 |
| Willing to Enroll | 87.7% | 12.3% | 537,330 |

**Source: State Health Access Data Assistance Center, University of Minnesota.** ***2004 Virginia Health Care Insurance and Access Survey: Select Results.*** **Draft report. March 2005.**

A medical home is defined as a personal doctor or nurse from whom the child receives family-centered, accessible, comprehensive, culturally sensitive and coordinated health care. In 2003, less than half of parents (46.1%) agreed that their child had a medical home. However, 85% of parents did affirm that their child had a personal doctor or nurse who was familiar with their child and their child's health history. This varied by race and ethnicity, with fewer Hispanic and black children identifying a personal doctor or nurse (71% and 78% respectively) than white children (89%).

Over three-quarters (78%) of children and youth under eighteen visited the doctor or nurse for a preventive visit in the past year. This varied by age, with 93% of children under six receiving preventive care as compared with 72% of 12 – 17 year olds. Hispanic children and children with no health insurance experienced much lower rates of preventive visits (69% and 58% respectively).

While about three-quarters of children and youth receive preventive visits, only 58% received both medical and dental preventive care in the past year. A previous study, conducted in 2001, found that among children aged two or older, 13% had never received dental care and an additional 13% had not received dental care within the last 12 months.[33]

Mental health care is another critical area of unmet need. Of the children with current emotional, developmental, or behavioral problems that require treatment and counseling, only 62% received mental health care in the past year.

[33] Ellis, J., Adler, J., Sarkar, M., *Results from the 2001 Virginia Children's Health Access Survey,* The Survey and Evaluation Research Laboratory, Center for Public Policy, Virginia Commonwealth University, August 2002.

## C. Children with Special Health Care Needs

### Accessibility, Affordability and Unmet Needs for Services

Almost all (96.1%) of CSHCN in Virginia were insured in 2001.[34] In 2003, the percentage was even higher (98.1%).[35] However, this level of coverage does not necessarily extend throughout the year: in 2001, one in twelve parents (8.1%) confirmed that their child had no insurance at some point during the past year. Also, in spite of the excellent coverage level, 29% of parents affirmed that the coverage plan for their child with special health care needs was inadequate.

In 2001, one in five parents (21.4%) had experienced financial problems as a result of their child's condition and one in ten parents made payments of at least $1000 in the past year for their child's medical care. In addition to increased expenses, parents had to devote more time to their child: close to a third (29.2%) had to cut back or stop work due to their child's health.

Title V was recognized by over a fourth of survey respondents (26.9%), but only a minute number (1.4%) of those who had heard of Title V actually benefited from its services. Seven percent (7.2 %) received SSI benefits.

One in five parents whose child needed specialty care stated they had difficulty getting a referral for the care.

In Virginia, 12.1% of CSHCN had an unmet need for at least one health service. At the national level[36], the most common unmet needs, for those children who needed them, were for communication aids or devices (24.7% of those who needed this service had unmet need), substance abuse treatment or counseling (20.8%), and mental health care or counseling (18.1%).[37]

Underinsurance is a critical construct in understanding the adequacy of the health services system for CSHCN. Broadly defined, underinsurance is insurance whose depth and breadth of coverage is in some way inadequate to meet the child's needs. In 2004, in collaboration with the Virginia Commonwealth University's Leadership Education in

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[34] Child and Adolescent Health Measurement Initiative, *National Survey of Children with Special Health Care Needs: Virginia State Profile,* Retrieved 06/12/05 from http://cshcndata.org/DesktopDefault.aspx

[35] Child and Adolescent Health Measurement Initiative (2005). *National Survey of Children's Health,* Data Resource Center on Child and Adolescent Health website. Retrieved 06/12/05 from www.nschdata.org

[36] The Virginia sample is too small for estimates to be considered reliable.

[37] Child and Adolescent Health Measurement Initiative, *National Survey of Children with Special Health Care Needs: Virginia State Profile,* Retrieved 06/12/05 from http://cshcndata.org/DesktopDefault.aspx

Neurodevelopmental Disabilities program, Title V staff examined the national CSHCN survey to determine whether there are items that can serve to operationalize alternative definitions of underinsurance, construct definitions from the survey items that are consistent with structural and economic definitions of underinsurance and devise an algorithm for determining underinsurance for each, and to compare these two underinsurance definitions with the MCHB definition of inadequate insurance, which takes the attitudinal approach to the construct. Analyses included Virginia children who were insured throughout the survey period. The findings demonstrated that that alternative definitions of underinsurance yield dramatically different underinsurance rates: attitudinal (28.9%), economic (25.6%), and structural (2.9%). Further, even when yielding similar rates, alternative definitions may identify substantially different sets of children. The likelihood of being underinsured has a strong association with low-income status and pervasiveness of the child's special health care needs. Understanding these factors and their implications will be important when planning accessible and comprehensive health care systems for CSHCN.[38]

During 2003 and 2004 VDH conducted assessments of its Child Development Clinic (CDC) network that serves children from birth to age 20 years who are suspected to have or diagnosed with developmental, emotional or behavioral disorders. The clinics provide interdisciplinary evaluations, treatment planning, and care coordination. The study found that the availability of the comprehensive diagnostic evaluation (CDE) provided by the CDCs is minimal to non-existent from the private sector providers. While the individual components of the CDE may be available, it does not appear to be available as a comprehensive "package" in a single location, and as a result the interdisciplinary aspect of the CDE would be missing. Moreover, the availability to Medicaid recipients of even the various individual components is rather limited. For these reasons, along with the fact that the study found that the CDC staff and the clinic's customers feel strongly that they should remain a part of VDH, the assessment concluded that VDH should continue to operate the CDCs for the foreseeable future. From the findings of the interviews, data review, focus groups, and other data collection methodology, recommendations were developed and are now being addressed in the following areas: service

[38] "Defining Underinsurance Among Children with Special Health Care Needs: A Virginia Sample". *Maternal and Child Health Journal*. June 2005.

delivery model, staff composition, data collection system, revenue maximization, funding allocation, organizational structure, interagency agreements, and evaluation.

In 2003, about half (49.4%) of CSHCN in Virginia had a medical home, as defined previously. The Maternal and Child Health Bureau has established six parameters – medical home, insurance coverage, screening, organization of services, families' roles, and transition to adulthood – by which the system of care for CSHCN is measured. Baseline statistics for five of the six parameters were obtained for each state and the nation through the National Survey of Children with Special Health Needs in 2001.

Virginia fares better than the nation on two of the five indicators, insurance coverage and organization of services, and for the remaining three, is not different from the country as a whole. Transition to services is the weakest area, both in Virginia and nationally, and in particular, less than a third of children (31.1%) have received vocational or career training (see Table 31 on the next page).

**Table 31. Progress Toward Implementing Community-Based Systems of Services for Children with Special Health Care Needs, Virginia and U.S. 2001**

| Measure | Virginia | U.S. | Comparison Virginia with U.S. |
|---|---|---|---|
| **1. Families of CSHCN will partner in decision-making and will be satisfied with the services they receive**. | **58.3** | **57.5** | **Same** |
| a. Doctors usually or always make the family feel like a partner | 81.2 | 84.3 | Same |
| b. Family is very satisfied with services received | 63.0 | 60.1 | Same |
| **2. CSHCN will receive coordinated ongoing comprehensive care within a medical home.** | | | |
| a. The child has a usual source of care | **54.5** | **52.6** | **Same** |
| i. The child has a usual source for sick care | 91.7 | 90.5 | Better |
| ii. The child has a usual source for preventive care | 91.8 | 90.6 | Better |
| | Unreliable | 98.8 | |
| b. The child has a personal doctor or nurse | | | |
| | 85.9 | 89.0 | Worse |
| c. The child has no problems obtaining referrals when needed | | | |
| | 80.0 | 78.1 | Same |
| d. Effective care coordination is received when needed | | | |
| i. The child has professional care coordination when needed | 44.0 | 39.8 | Same |
| ii. Doctors communicate well with each other | 88.3 | 81.9 | Better |
| iii. Doctors communicate well with other programs | 63.0 | 54.4 | Better |
| | 37.0 | 37.1 | Same |
| e. The child receives family-centered care | | | |
| i. Doctors usually or always spend enough time | 68.9 | 66.8 | Same |
| ii. Doctors usually or always listen carefully | 85.2 | 83.6 | Same |
| iii. Doctors are usually or always sensitive to values and customs | 88.9 | 88.1 | Same |
| iv. Doctors usually or always provide needed information | 88.0 | 87.0 | Same |
| v. Doctors usually or always make the family feel like a partner | 81.3 | 81.0 | Same |
| | 86.6 | 85.9 | Same |
| **3. Families of CSHCN will have adequate private and/or public insurance to pay for the services they need.** | **65.6** | **59.6** | **Better** |
| a. The child has public or private insurance at time of interview | 96.1 | 94.8 | Better |
| b. The child has no gaps in coverage during the year prior to the interview | | | |
| c. Insurance usually or always meets the child's needs | 91.9 | 88.4 | Better |
| d. Costs not covered by insurance are usually or always reasonable | 88.4 | 85.5 | Better |
| e. Insurance usually or always permits child to see needed providers | 75.2 | 71.6 | Better |
| | 92.9 | 87.8 | Better |
| **5. Community-based service systems will be organized so families can use them easily.** | | | |
| a. Services are usually or always organized for easy use | **80.1** | **74.3** | **Better** |
| | 80.1 | 74.3 | Better |
| **6. Youth with special health care needs will receive the services necessary to make transitions to adult life, including adult health care, work, and independence.** | | | |
| a. The child receives guidance and support in the transition to adulthood. | **Unreliable** | **5.8** | |
| i. Doctors have talked about changing needs. | | | |
| ii. The child has a plan for addressing changing needs. | Unreliable | 15.3 | |
| iii. Doctors discussed shift to adult provider. | 51.8 | 50.0 | Same |
| b. The child has received vocational or career training. | 52.5 | 59.3 | Same |
| | 40.6 | 41.8 | Same |
| | 31.1 | 25.5 | Same |

**Better: National value is below the Virginia percentage minus the standard error. Worse: National value is above the Virginia percentage plus the standard error. Same: National value is within the Virginia percentage plus or minus the standard error.** Source: National Center for Health Statistics, *Progress Toward Implementing Community-Based Systems of Services for Children with Special Health Care Needs: Summary Tables from the National Survey of Children with Special Health Needs, 2001*. April, 2003.

The Title V network of six Care Connection for Children (CCC) centers serves children from birth through age 20 years who have been diagnosed with a disorder that has a physical basis; has lasted, or is expected to last, at least 12 months; and produces one or more of the following: need for health and ancillary services above the usual for the child's age, limitation in function or activities, and dependency on medications, special diet, medical technology, assistive devices or personal assistance. These regional Centers of Excellence for CSHCN facilitate access to comprehensive health and support services that are collaborative, family-centered, culturally sensitive, fiscally responsible, community-based, coordinated, and outcome-oriented to CSHCN and their families. The centers provide information and referral to resources, care coordination, insurance case management, family-to-family support, assistance to families with the transition from child to adult oriented health care systems, and training and consultation with community providers on CSHCN issues. In FY 04, 4,894 clients received CCC services.

The Title V network of eleven Child Development Clinics (CDC) serves children from birth to age 20 years who are suspected to have or diagnosed with developmental, emotional or behavioral disorders. The clinics provide interdisciplinary evaluations, treatment planning, and care coordination. In addition the clinic staff provide consultation, screenings for early identification of persons with developmental disorders, information and referral, intervention services, and training and technical assistance to community providers. CDCs provided services to 2,122 clients in FY 04.

The Title V Virginia Bleeding Disorders Program (VBDP) serves children and adults who are diagnosed as having inherited bleeding disorders. The program works in collaboration with a network of comprehensive bleeding disorders clinics that have a multidisciplinary team that focuses on the physical, emotional, social, educational, financial, and workplace impact of the disorder. The services of the program include assistance in accessing comprehensive specialty health care services, care coordination, insurance case management, information and referral, family-to-family support, assistance to families with the transition from child to adult oriented health care systems, and training and consultation with community providers. VBDP provided services to 218 clients in FY 04.

The *Code of Virginia* establishes the Part C System of Early Intervention Services of the IDEA in Virginia. It is designed to meet the developmental needs of children aged 0-3 who have a 25 percent developmental delay in one or more areas, atypical development, or a diagnosed

physical or mental condition that has a high probability of resulting in a developmental delay. These services also address family needs related to enhancing the child's development. On December 1, 2004, 5,369 infants and toddlers were receiving early intervention services. For the period of December 2, 2003 to December 1, 2004, 9,615 infants and toddlers received services.

A statewide HIV/AIDS Resource and Consultation Center addresses the special health care needs of persons with HIV through education of health care professionals on HIV-related issues. It offers clinical training for health care practitioners and students, medical consultation to community health care providers, and provision of current technical medical materials and literature. This center is funded by a state appropriation of $545,000 in SFY 06.

To provide medical care and essential support to individuals with HIV infection, Ryan White Title II funds ($ 22.6 million in grant year 2005) are used to provide free HIV-related medications and to support five regional care consortia which assess client needs, identify service gaps, and provide needed services. In 2004, 3,278 eligible clients were served by the consortia and 3,409 clients received HIV medications through the AIDS Drug Assistance Program. Seven percent of these were under age 24 (Division of HIV, STD, and Pharmacy Services, Virginia Department of Health).

Regional Comprehensive Sickle Cell Centers, Genetic Centers, and Metabolic Treatment Programs also serve families of CSHCN. These are discussed further under Population-Based Services.

## IV. Population-Based Services

Title V serves various population-based cohorts among women, infants, children, and CSHCN. Several of these programs have multiple funding streams. Some of the programs discussed are not Title V-funded, but are included to help complete the picture of services available statewide. Many of the population-based programs managed by the state operate through community-based coalitions and organizations. Title V coordinates with universities to evaluate several of these programs. Some CSHCN services, such as the Genetics Centers, are contracted largely through university-based health centers. Other collaborative efforts include working with state level professional organizations, such as the Virginia Chapter of the American Academy of Pediatrics and the Medical Society of Virginia, involving both the private and public sectors. Mandated programs, such as immunizations, are available statewide. Other

programs more reliant on community-based organizations, such as teen pregnancy prevention, are often in targeted areas or in areas selected through competitive application processes.

### A. Pregnant Women, Mothers, and Infants

VDH reintroduced maternal mortality reviews in spring 2002. Early review efforts were carried out through a partnership between the Medical Society of Virginia and VDH, Office of Family Health Services. This renewed effort is now located in the Office of the Chief Medical Examiner (OCME), which conducts maternal mortality reviews in partnership with the Office of Family Health Services.

The Maternal Mortality Review Team reviews all deaths to women within one year of the end of their pregnancy, whether that pregnancy ended with a termination, a fetal death, or a live birth. Preliminary information suggests that one-half of these deaths are from natural causes, and the other one-half are attributed to homicide, suicide, and unintentional injuries. The team reviews the circumstances surrounding the fatal injury or event and makes two decisions: (1) whether or not the death was pregnancy-related and (2) whether or not the death was preventable. Team members brainstorm about prevention strategies to prevent similar deaths.

Since the team was in start-up mode, activities in FY 03 were devoted to the theory and practice of team review. This required the development of abstraction tools, a method for collecting and summarizing cases, confidentiality and review procedures, and a team identity. The team met six times and began reviewing maternal deaths that occurred in 1999.

In the second year, the team met five times, completing its review of 1999 and 2000 maternal deaths. Patterns in maternal death were becoming apparent, and the team's own capacity for multidisciplinary deliberation began to gel. After completing two years of maternal deaths in the Commonwealth, the team looked at preliminary data trends and made the decision to publish a report in the next fiscal year.

The team has concluded its review of 1999-2001 maternal deaths in the Commonwealth in anticipation of a three-year report on these deaths. Team members will review data trends and develop recommendations during the summer and fall of 2005. A slide presentation has been prepared reflecting preliminary data findings so that OCME staff and maternal mortality review team members can share early findings from the reviews.

Team members also developed a written protocol outlining its purpose, mission, policies, and procedures, as well as the professional groups and organizations to be represented on the

team. The protocol was developed as a training tool for new members, and as a document to be shared with policymakers, prevention, and data partners as appropriate. Teamwork on this protocol revealed a great deal about its progress over the past few years. As team members discussed elements of the protocol, they re-visited and refined their understanding of core team concepts such as "preventability" and "consensus," and broadened representation on the team to facilitate more comprehensive multidisciplinary review.

Through its coordinator, Virginia's team contributed to a monograph that will explore practices and policies for maternal mortality review in nine states. The monograph was published through the Association of Maternal and Child Health Programs (AMCHP) and is tentatively entitled "State Maternal Mortality Review: Beyond the Medical Model – Accomplishments in Nine States."

The team is currently recruiting a new coordinator. Once hired, the new coordinator will establish contacts with colleagues in other states and learn about the theory and practice of fatality review, record collection, case abstraction, data analysis, and report preparation. Future plans are to develop a longitudinal database and coding manual to support data analysis and a Maternal Mortality in Virginia web site.

In late September 2004, DWIH was awarded a $250,000 grant (*State Grants for Perinatal Depression and Related Mental Health Problems in Mothers and Families)* by the U.S. Department of Health and Human Services. The project, entitled The 3 Ps of Perinatal Depression: Perinatal Health, Provider Education and Public Awareness, is taking a three-pronged approach to improving mental health services for women and their families during the perinatal period. A web-based curriculum will educate providers about the signs and symptoms of perinatal depression (PD) and provide them with the tools to easily recognize and refer pregnant and postpartum women to treatment. The curriculum will be developed in consultation with the editors of the definitive textbook on women's mental health based at two Virginia universities.

The RPCs assisted DWIH in compiling a list of providers who see pregnant and postpartum women and mental health professionals in their communities. They will use the provider list to market this curriculum and make providers aware of how they can get continuing education credits for completing it. The list of mental health providers will be used as a referral list for health care providers.

DWIH contracted with the Northern Virginia Area Health Education Center (NVAHEC) to conduct five focus groups and identify current barriers to mental health experienced by different ethnic groups needing mental health care. This will result in the first such report of its kind. Findings will be incorporated in outreach efforts, future health department campaigns, and the curriculum used to train providers.

An expert panel of public and private providers, state agencies, and consumer representatives was created to provide advice on curriculum content; to increase the capacity of the health care system to identify and treat perinatal patients using existing resources; and to identify and attract resources to improve the system of care.

The Virginia Title X Family Planning Program has always provided nutritional counseling on the importance of including calcium in their diet to women seeking family planning services. During the fall of 2004, the FDA issued a warning stating that women who use Depo-Provera Contraceptive Injection may lose significant bone mineral density especially with increased duration using this method of contraception. Additionally, concern has been raised about the unknown effects of long-term use by adolescents and the increased risk for osteoporotic fracture. This warning prompted all family planning providers to counsel women about the unknown long-term effects of this medication and to offer other effective contraceptive methods as alternatives. Women and teens at the two-year point on Depo Provera are being screened for osteoporosis risk factors. Teens on this method are given special counseling on the importance of increasing calcium intake to at least 1300mg per day, weight bearing exercising, and avoiding tobacco and alcohol products, and they are evaluated for other effective methods of contraception. Nationally, research continues to evaluate the relationship between long-term use of Depo Provera and the development of osteoporosis, and increased risk of osteoporotic fractures later in life.

The Title X Family Planning program focused much of its 2004 training efforts on educating staff that are working with minors in Virginia family planning settings. This resulted in a collaborative training effort between the Family Planning Region 3 Training Center and VDH. The objective of the training was to increase staff awareness of the legal issues related to mandatory reporting, age of consent, sexual coercion, and family involvement. Additionally, the trainings emphasized state laws and reporting requirements related to child abuse, child

molestation, sexual abuse, rape, and incest, and how these requirements related to the duties performed in family planning clinics.

Three trainings were held statewide during 2005 in Charlottesville, Norfolk, and Wytheville, with over 250 participants. A video of the training and training materials were made available to all 35 health districts for staff unable to attend. As a result of the trainings, all health districts have developed a written process for mandated reporting. A future Title X training focus will be to help staff increase family involvement when minors seek family planning services.

The VDH Family Planning Program collaborates with the Division of STD/AIDS and the Division of Consolidated Laboratory Services on a CDC-funded infertility project to screen women served in STD and Family Planning Clinics for chlamydia. All three organizations are members of the Region III Chlamydia Project Advisory Committee that provides guidance and recommendations regarding chlamydia prevention. A 2004 work plan was developed in the following areas: laboratory, data collection and analysis, outreach, education and training, and clinical program management. The VDH Chlamydia Project is determining if screening criteria need to be changed on the basis of prevalence. In addition, they intend to provide state and local health department data to each health district on a yearly basis.

The report of the Virginia Action Learning Lab (ALL) task force survey was completed. The purpose of the survey was to determine if health care providers who serve women of childbearing age are providing 1) HIV counseling and testing and 2) screening and assessment of pregnant women around substance use and abuse. Data support the need for increasing provider education and support for rapid testing options during labor and delivery. Since the report was completed, CDC endorsed rapid testing for all women who enter hospital labor and delivery with an unknown HIV status.

The Partners in Prevention (PIP) initiative, funded with TANF dollars ($765,000 in FY 05 and FY 06) and managed by DWIH, is dedicated to reducing non-marital births without increasing the incidence of abortion. PIP collaborates with the Virginia Abstinence Education Initiative. PIP supports ten community-based programs, which provide various multi-level, unique interventions in 18 Virginia localities. The interventions include book clubs; male mentoring and education through Midnight Basketball Leagues; intense individual case management; and PIP course instruction in the community and detention centers. Through the

aforementioned interventions, PIP programs educate, mentor, and counsel young adults aged 20-29 on the benefits of waiting until marriage to conceive a child and delaying sexual activity; appropriate family planning methods; male responsibility and the risks associated with high-risk sexual behaviors in order to foster healthy attitudes towards family, career, and marriage. Since 60 percent of 2003 non-marital births occurred to females aged 20-29, young adults are the primary target of PIP. This represents a new focus for many community-based prevention programs, which have previously targeted teens exclusively.

As a non-marital birth reduction program that promotes healthy families through marriage, Partners in Prevention (PIP), has had the opportunity to collaborate with the Virginia Family Planning Program and the Virginians Against Domestic Violence coalition. A research-driven social marketing campaign was implemented in FY 02 and FY 03 to promote the public health benefits of waiting until marriage to have children. The educational efforts of 17 community coalitions continued in FY 02 through FY 04 with an emphasis on contraception education, domestic violence prevention, and the formation of healthy relationships.

An evaluation conducted by the College of William and Mary in August of 2004 revealed the PIP program had a positive impact on the attitudes, beliefs, and behavioral intentions towards marriage, family, and career. Specifically, when compared to individuals who did not participate in the PIP program, participants recognized that raising children within marriage was easier and more health promoting than raising children prior to marriage. Additionally, the behavioral intentions of participants suggested that they were less likely than non-participants to engage in pre-marital sex or to have children.

Other findings from the PIP evaluation resulted in a modification of the program that requires the ten FY 05 awardees to offer multi-level, long-term interventions rather than "one-stop" interventions such as health fairs. It is hoped that this modification will have a noticeable impact on non-marital births, while not increasing the abortion rates in young adults aged 20-29. The areas of focus and goals of the programs offered by the awardees in the future must include the following: marriage prior to conception; delay in sexual activity prior to marriage; family planning; male responsibility; discouraging high risk sexual behaviors; attitudes and behavior intentions regarding marriage; and career and family. Additionally, to ensure that a consistent, approved PIP message is conveyed, the Department launched a media intervention in FY 05

using the aforementioned research driven social marketing campaign, "Two Words," targeting the localities of FY 05 awardees.

The Virginia Breast and Cervical Cancer Early Detection Program (BCCEDP), Every Woman's Life, utilizes $2.7 million in federal funds awarded by the Centers for Disease Control and Prevention (CDC) to provide public awareness, screening, case management, professional education, and quality assurance for the early detection of these cancers. With BCCEDP serving women aged 40-64, unmet needs persist for underserved and uninsured 35-49 year olds. In 2005, Governor Warner issued Executive Directive 5 establishing a Cervical Cancer Task Force consisting of fifteen members to develop public awareness of the issue and to develop strategies to reduce the incidence of cervical cancer in the Commonwealth. The task force will issue a preliminary report to the Governor and the General Assembly by November 1, 2005. Dr. David Suttle, OFHS Director, is a task force member. Staff support is also provided by the Division of Women's and Infants' Health.

The Virginia Sudden Unexplained Infant Death (SUID) Program provides a statewide system to ensure that families who experience a death due to SUID receive family contact and bereavement services. In 2002, there were 72 of these deaths in Virginia. The Medical Examiner notifies the appropriate Regional Perinatal Council (RPC) of an infant's death up to one year (excluding homicides). The FIMR Coordinator for the RPC collaborates with health districts and other community-based organizations for appropriate services and referrals. The Virginia SIDS program was replaced with the SUID referral and notification system in January 2004 to help expedite the referral and notification process, so that the RPC could receive the notification of an infant's death sooner rather than after the completion of the death investigation. This early notification allows for the assessment and implementation of bereavement services sooner for all infants deaths, not just upon the notice of a SUID death from the medical examiner's office.

Each of the perinatal regions has at least one hospital offering NICU services. In Virginia, 17 Level III or Level IV hospitals provide services for neonates of all risk categories.

### B. Children

Immunizations are mandated by the *Code of Virginia* and are provided by all local health departments. VDH's Division of Immunization within the Office of Epidemiology has primary responsibility for this service. The division provides federal CDC funds to each health district for infrastructure enhancement of the vaccine delivery system. The CDC funded Vaccine for Children program provides vaccine at no cost for children who are Medicaid enrolled, Native American, or uninsured through local health departments and enrolled private physicians' offices. The Title V program supports immunizations by promoting quality primary care services through a medical home.

Title V supported several state and local efforts to provide parents and caregivers with information about immunizations. Since the statewide launch in FY05, 50,000 Governor's New Parent Kits have been provided to community partners for distribution. The New Parent Kit, geared for parents or other primary care givers, contains several items providing immunization information and resources. VDH Resource Mothers, along with partners CHIP of Virginia and Healthy Families, led distribution efforts. The kit contains the Bright Futures Health Record and a customized Baby's First Year calendar highlighting immunizations needed for each month including stickers to put on dates received and the toll-free VDH Division of Immunization information line.

Infrastructure is in place for a statewide childhood blood lead poisoning screening and intervention program. While the *Code of Virginia* requires reporting of child blood lead levels greater than 10 µg/dL to VDH, regulations effective July 1, 2001 require all laboratories to report all blood lead testing results on children under the age of 6 years to VDH within 10 days. This process allows for the timely referral for medical and environmental services. This database also provides for timely data matching for identifying high-risk populations (i.e. Medicaid, Section 8 Housing) and collaboration with other agencies to obtain HUD funding for lead remediation. Educational initiatives are in place to raise public awareness of lead-safe work practices, and raise physician awareness of the need for testing children for lead exposure. The surveillance and case coordination of children with elevated blood lead levels is funded by a grant from CDC. The EPA provides funding for all educational initiatives and assures environmental follow-up activities by licensed risk assessors. CDC, HUD, EPA, and the state Childhood Lead Poisoning

Prevention Programs (Lead-Safe Virginia at VDH) have developed a task force to coordinate and collaborate to eliminate childhood lead poisoning as a health hazard for children by 2010.

The Division of Dental Health supports population-based activities to reduce dental disease. Community water fluoridation is viewed as the single most effective public health measure to prevent tooth decay and improve oral health and 81 percent of Virginians drink water that has fluoride adjusted to the optimal level. Recent national studies indicate that water fluoridation will reduce dental decay in permanent teeth by approximately 17 to 40 percent. The Division of Dental Health (DDH) supports fluoridation in Virginia through one staff person and $53,000 ongoing funding for ongoing projects. DDH monitors water systems for compliance in conjunction with Virginia Department of Health Office of Drinking Water, reports water system data to the Center's for Disease Control and Prevention Water Fluoridation Reporting System (WFRS); provides information about the benefits of fluoridation to citizens and communities; and provides grant funding for communities to start or upgrade fluoridation equipment for water systems. In areas without access to community water fluoridation, school children across Virginia are eligible to participate in a weekly topical fluoride mouth rinse program. Currently, there are approximately 45,000 children in 50 counties statewide participating in the program. Studies indicate up to a 15 percent reduction in tooth decay for children participating in fluoride mouth rinse programs during elementary school years. DDH supports this program through staff and $100,000 in funding for fluoride rinse supplies. DDH staff provide oral health education and training is provided for health professionals, school staff and citizens by DDH staff that focus on school age, preschool age and adult populations. Recently the Division started a fluoride varnish program targeted at low- income children up to three years of age. Finally, the Division of Dental Health provides on site quality assurance review, recruitment, training and technical assistance to 25 local health districts with clinical dental programs.

A Healthy Child Care Virginia needs assessment examined concerns regarding health and safety environments in child care facilities. Facility staff identified control of communicable diseases and medication administration as the top health priorities of child care providers. Most facilities rely on VDH and DSS for health and safety resources. Title V program staff conduct training sessions for child care providers on medication administration by unlicensed persons, nutrition, and safety; disseminate safety information to families; and serve on the Head Start

Health Committee and the Healthy Child Care Virginia project advisory board. The child care health consultants work closely with local DSS licensing to improve quality in child care sites.

VDH's Center for Injury and Violence Prevention (CIVP) promotes childhood injury prevention through public information, training and community education, community events, and coalitions. Unintentional injury programs focus on home, recreation, and transportation safety and target child care providers, schools, law enforcement, health care providers and other community based entities. The Center distributes materials through its resource center, provides program consultation and technical assistance, and serves as the consumer product safety liaison for Virginia.

CIVP's Child Passenger Safety Program provides consultation and coordinates statewide multi-media information campaigns on child transportation safety issues such as motor vehicle passenger and bike safety. Staff develop education materials on safety seats, booster seats and seat belt use and provide training and technical assistance throughout Virginia on the proper use and installation of child safety seats.

CIVP works cooperatively with the Virginia Sexual and Domestic Violence Action Alliance and local sexual assault centers throughout Virginia and coordinates a CDC funded Rape Prevention Education Program. The Center is coordinating a CDC-funded planning initiative around violence perpetrated by and toward children and adolescents.

VDH has the lead responsibility for coordinating activities concerning youth suicide prevention in the Commonwealth. Within VDH, CIVP analyzes and reports on suicide data, engages in collaborative statewide prevention planning, and coordinates public awareness activities and statewide training to school personnel, human service providers, faith communities, and others on suicide prevention and intervention, including identification of persons at-risk of suicide, screening, counseling, and referral. The Center's suicide prevention activities primarily focus on youth.

The Tobacco Use Control Project (TUCP) funds local coalitions across the state to develop and promote policies relating to clean indoor air and the dangers of second-hand smoke. TUCP also funds youth based coalitions that mentor younger youth on how to advocate for policy change regarding smoke-free restaurants, school grounds and incorporating tobacco prevention curriculum in their schools. TUCP is also funding a statewide tobacco Quitline called, Quit Now Virginia, 1-800-QUIT NOW. The Quitline will help decrease the amount of

secondhand smoke exposure to youth as well as help current tobacco users stop smoking. In 2004, Virginia had the lowest cigarette tax (2.5 cents) in the country; Virginia's cigarette tax is now at 32.5 cents and has a ten percent tax on other tobacco products. The increase in the tobacco tax helps decrease the ability for youth to purchase tobacco products.

To promote responsible sexual behavior, the Virginia Abstinence Education Initiative includes four abstinence until marriage model programs to reduce teenage sexual activity, sexually transmitted diseases, and pregnancies. The initiative utilizes media to provide an abstinence until marriage message to counter other prevalent sexual messages. A longitudinal, quasi-experimental program evaluation design is in place for tracking youth sexual behaviors, and fertility and to measure program effectiveness. An evaluation consortium composed of university representatives is involved in the evaluation efforts. Training in reinforcing the abstinence message is given to youth-serving agencies, health professionals, and faith workers. This initiative is funded by the Title V Abstinence Education grant.

TANF provides funding for the Teen Pregnancy Prevention Initiatives (TPPI) in the Richmond, Norfolk, Alexandria, Roanoke City, Crater, Portsmouth, and Eastern Shore health districts. These sites were mandated due to historically high teenage pregnancy rates. VDH is directed to evaluate these programs to ensure that the prevention methodologies are successful and transferable to other areas. TPPI sites provide a variety of site-specific programs that were determined through community needs assessments and in conjunction with a local teen pregnancy prevention coalition. VDH contracts with Virginia Commonwealth University's (VCU) Survey and Evaluation Research Laboratory (SERL) for the evaluation component, which includes qualitative and quantitative data regarding program outcomes.

DSS provides leadership for the prevention of child abuse and neglect. Using state and multiple federal grant programs, DSS contracts with community organizations to provide a variety of prevention services (including some home visiting and case management services described under Enabling Services) targeting the general population and families at high-risk for child abuse and neglect. Prevent Child Abuse Virginia provides technical assistance for parenting education programs and for Parents Anonymous groups. CIVP works closely with local organizations to provide Child Assault Prevention Facilitator's Trainings. An OFHS staff member serves on the Governor's Child Abuse Advisory Committee.

### C. Children with Special Health Care Needs

To reduce unnecessary morbidity and mortality from potential or existing genetic conditions, the *Code of Virginia* requires screening of all newborns for biotinidase deficiency, phenylketonuria (PKU), hypothyroidism, homocystinuria, galactosemia, and Maple Syrup Urine Disease, congenital adrenal hyperplasia, and medium chain acyl CoA dehydrogenase deficiency, and sickle cell diseases. In 2003, 98,991 infants were screened and 111 infants were diagnosed with having one of these conditions. As part of the Newborn Screening Services, VDH notifies the attending physician of any suspicious results. Further diagnostic testing, if required, is performed at a laboratory of choice as the state laboratory has only screening capability. In 2005, the Virginia General Assembly passed legislation that will expand the current newborn screening panel to include those disorders consistent with the uniform screening panel recommendation in a 2004 report from the American College of Medical Genetics. This expanded panel will be implemented as of March 1, 2006. A fee-for-service program, Newborn Screening Services is supported by newborn screening fees through the Department of General Services, Division of Consolidated Laboratory Services**.**

Genetics screening/testing, education, counseling and follow-up services are provided through four regional centers located in Charlottesville at the University of Virginia (UVA), Richmond at the Virginia Commonwealth University Medical Center (VCUMC), in Fairfax at Genetics and IVF Institute, and in Norfolk at Eastern Virginia Medical School (EVMS) and 11 satellite clinics. Long-standing contracts with UVA and VCUMC support metabolic treatment services for indigent families and in 2004 EVMS was contracted to further expand those services. Title V funding assures service availability for all Virginia residents and serves to remove financial barriers for the medically indigent. Access to service, however, continues to be a problem. The need for enhanced understanding on the part of insurers and public and private providers that genetics is an integral part of both health promotion and disease prevention continues.

VDH has a special food products program that provides medical formulas needed to treat children with PKU in medically indigent families at a cost not exceeding 2 percent of their gross income. VDH also provides special low protein modified foods for treatment for inborn errors of metabolism and is responsible for up to $2,000 annually per diagnosed person, including pregnant women and children. Currently 69 Virginia children up to age 21 years are enrolled in

the metabolic treatment program and receive formula and special low protein modified foods through the centrally administered VDH special food products program (Division of Child and Adolescent Health, Virginia Department of Health).

The *Code of Virginia* mandates VDH to establish a voluntary program for screening individuals for sickle cell disease or trait. The Virginia Sickle Cell Awareness Program (VASCAP), through a contract with Virginia Commonwealth University, provides the adult screening and education services. VASCAP also provides the education to schools, organizations, and other groups; conducts outreach; and promotes public awareness regarding hemoglobinopathies. The screenings are done in the local health departments and include screening of family planning and maternity clients with appropriate one-on-one counseling.

Four regional Comprehensive Sickle Cell Centers provide comprehensive services for those affected by sickle cell with treatment, follow-up, physician consultation, family and client education, case management, and other services aimed at assisting families. All newborns identified through the Newborn Screening Services Program are referred to one of the regional centers and efforts are made to secure a medical home for them. These centers are funded by allocated state funds of $250,000 for the provision of sickle cell services. The VDH Title V program provides the oversight and technical assistance for these centers.

The *Code of Virginia* in 1985 established the Virginia Congenital Anomalies Reporting and Education System (VaCARES), a statewide birth defects registry. VaCARES collects data to evaluate possible causes and seeks to improve diagnosis and treatment of congenital anomalies. Virginia hospitals submit reports on children from birth to age 2 who have at least one diagnosis from a specified ICD-9 code list of anomalies. In September 2002, hospitals began reporting directly into a newly designed and implemented web-based reporting system, the Virginia Infant Screening and Infant Tracking System (VISITS). In 2003, a detailed report entitled, "Virginia Congenital Anomalies Reporting and Education System: Birth Defect Surveillance Data 1989-1998", was published. This 10-year report provides statewide data and analysis intended for use by local health departments, researchers, and others interested in birth defects in the Commonwealth. Under the auspices of the Genetics Advisory Committee, Virginia Commonwealth University, Department of Human Genetics received a March of Dimes grant to begin conducting a multistage needs assessment of the state of genetics in Virginia. This is the first step in developing a comprehensive state genetics plan intended to better address overall

genetics issues that include genetic education and information, gaps in service delivery, family and client issues, and emerging genetic advances. There continues to be a need for better data to identify service needs and guide future program planning for Virginia's children with special health needs. The Title V Program funds VaCARES.

The *Code of Virginia* requires that all infants born in a hospital having a newborn nursery be given a hearing screening before discharge. The *Code* also requires health insurers and health maintenance organizations, including Medicaid and the state's health coverage plan for state employees, to provide coverage for infant hearing screenings and certain other audiological examinations. In addition, the *Code* gives VDH responsibility for tracking and follow up including identifying and monitoring infants with hearing loss to ensure that such infants receive appropriate early intervention through treatment, therapy, training, and education. Through the Virginia Early Hearing Detection and Intervention Program (VEHDIP), a state level advisory committee, hospital screening program, and data system are in place for all newborns to receive screening and follow-up for hearing loss. Program activities include implementation of tracking and follow-up activities, development of parent reference materials, professional and public education, and program evaluation. The proportion of newborns screened for hearing loss increased from 90 percent in 2000 to 96 percent in 2003. Progress toward other program goals includes an increase in percent of referred infants who have audiological assessment before three months of age from 59% in 2000 to 71% in 2003, and an increase in percent of infants with hearing loss enrolled in intervention services before six months of age from 12 percent in 2002 (no data were available for 2000 and 2001) to 40 percent in 2003. The Title V Program funds VEHDIP with support from a HRSA EHDI grant.

Based on the Centers for Disease Control and Prevention predictor model, Virginia ranks 14$^{th}$ among the 50 states in the estimated number of children with elevated blood lead levels. Approximately 13,800 children (4.4%) in Virginia under the age of six years are estimated to have a blood lead level above the level of concern (10 micrograms of lead per deciliter of blood). *Code of Virginia* requires all children determined to be at risk to be screened for elevated blood lead levels at the age of one year, two years, and between the ages of 36-72 months if never tested previously. All laboratories are required to report the results electronically within ten days. Lead poisoning is a reportable disease in Virginia. VDH receives federal funding from the U.S. Environmental Protection Agency and the Centers for Disease Control and Prevention for

the Lead-Safe Virginia Childhood Lead Poisoning Prevention Program. These funds are used to coordinate blood lead screening, medical follow-up, environmental lead hazard investigation, risk assessments, and public education.

Over the last few years, planning and the first step have occurred to develop a systematic, statewide mechanism to identify all CSHCN. While databases exist for the Newborn Screening Program, VEHDIP, VaCARES, Care Connection for Children (CCC) network, and Lead Poisoning Prevention Program that help determine children with special needs, these systems are not adequate to recognize all children with conditions and illnesses that limit their ability to function. The first step of implementation has been completed. The VEHDIP and VaCARES databases were integrated in a web-based surveillance and data management system, the Virginia Infant Screening and Infant Tracking System (VISITS). In the next step, VISITS will be redesigned and linked with CCC-SUN (CCC database) and LeadTrax (Lead Poisoning Prevention Program database) or the National Electronic Disease Surveillance System Lead Module in order to minimize the number of infants lost to follow-up; expand referrals of identified children with special health care needs to the appropriate source for intervention and/or care coordination; improve the mechanism for identifying children with late onset or progressive hearing loss; modify the birth and death certificate linkages methodologically for ensuring unduplicated individual identifiable data; comply with requests for EHDI and birth defects screening and outcome data; expand integration/linkages with other surveillance information systems; ensure high-quality data; and, improve efficiency, security, and cost-effectiveness.

## V. Infrastructure-Building Services

Strengthening infrastructure continues as a focus of VDH and the Title V program. To promote comprehensive systems of services, the Title V program has participated in or taken the lead in numerous interdisciplinary efforts to bring together both the public and private sectors. Movement continues in this direction through collaborative efforts involving all maternal and child health populations. Cooperative efforts with agencies such as DMAS, DOE and DSS have grown due to shared target audiences. Promoting the expansion of cooperative efforts with the Department of Mental Health, Mental Retardation and Substance Abuse Services has been recognized as a need.

In September 2004, the OFHS staff participated in a CAST-5 assessment of the current ability to serve the MCH populations. One of the overall themes identified in the assessment included the need for better data collection, analysis and use to 1) inform programmatic decision-making, 2) enhance accountability and quality improvement in progressing particularly with regard to the local level, 3) drive improvements in MCH outcomes, 4) better identify emerging public health issues, and 5) educate key stakeholders about Title V supported activities. Assessment functions have been strengthened by building collaborative arrangements relating to sharing data. In addition, the SSDI grant now supports a MCH Epidemiologist through a contract for a faculty level epidemiologist through the Virginia Commonwealth University's Department of Epidemiology and Community Health in the newly formed School of Public Health. Future plans to improve the OFHS assessment functions include developing a data warehouse for easily accessible data, providing linked data, and implementing an OFHS surveillance plan that includes routine data reports. Currently data to assess risk factors during pregnancy, such as perinatal substance use and domestic violence, and youth health related behaviors are unmet needs. Virginia does plan to apply for PRAMS funding if it becomes available.

Title V staff represent the MCH interest on numerous interagency councils, task forces and committees such as the Governor's Office for Substance Abuse Prevention (GOSAP), the Governor's Council on Substance Abuse Services, and the Governor's Advisory Board on Child Abuse and Neglect, as well as working groups such as the PASS Initiative work group.

To facilitate the work of the Secretary of Health and Human Resources, the Title V program staff provide analysis and recommendations to the Governor on legislation before the General Assembly that will directly affect VDH programs and women's and children's health in Virginia. OFHS staff review and comment on legislation, regulations, and standards of other state agencies from a maternal and child health perspective.

### A. Young and Pregnant Women, Mothers and Infants

The Governor, through Executive Directive 2, created the Governor's Work Group on Rural Obstetrical Care. The Work Group, lead by the Secretary of Health and Human Resources, consisted of representatives of health care organizations, professional provider groups, university leaders, and other entities determined by the Governor. At the request of the Secretary of Health and Human Resources, Dr. David Suttle, Director of the Office of Family

Health Services, staffed the Quality of Care subcommittee to address the quality of prenatal care. A preliminary report was due July 1, 2004 and the final report by October 1, 2004.

In addition, the Quality of Care Subcommittee was also charged with examining how requirements of the Virginia Birth-Related Neurological Injury Compensation Program (VBRNICP) may contribute to the work of the Governor's Work Group. Physician and hospital participation in the program has steadily declined. In some areas, physicians have refused to sign agreements saying they would not deliver babies of women on Medicaid for fear the women had not received prenatal care, would have adverse outcomes and would, therefore, increase physician liability and malpractice premiums. Today many informal agreements exist but fear of liability continues. Local arrangement agreements between VDH and providers to provide care to indigent and Medicaid pregnant women are a requirement under the VBRNICP and were out of date. One of the recommendations is that VDH will update the local plans, which may include memoranda of agreements with appropriate local obstetrical providers who are specified by the program and who are willing to provide care to poor pregnant women.

Based upon the recommendations in the preliminary report, the Governor provided emergency authority and funding, effective September 1, 2004, for the Department of Medical Assistance Services to increase the Medicaid payment rates for outpatient obstetrical and gynecological services by 34 percent through emergency regulations. There was also a recommendation in the final report requesting further increase in physician reimbursement and an increase in the hospital reimbursement.

There was much discussion regarding the role of certified nurse midwives (CNMs) and direct entry midwives in allaying the crisis regarding lack of obstetrical providers. Testimony highlighted the restrictions on certified nurse midwives because of the "supervision" clause in the Code, which limits nurse midwives to having direct medical supervision. Direct entry midwives cannot legally practice in Virginia. A compromise recommendation was to allow CNMs to enter into pilot projects with a collaborating physician or organization to provide obstetric care in medically underserved areas. Practice protocols and an evaluation plan are to be developed. VDH, with the Board of Health approval, is to take the lead to develop these projects.

Other recommendations include the following: a request for the expansion of eligibility for Medicaid coverage; several suggestions to revise insurance laws governing malpractice

insurance; encouragement to perinatal health providers to use evidence-based medical practices; and exploration in the development of an electronic health record that would include a universal risk screening tool for pregnant women.

The One Baby Care Regional Council meets semiannually to promote a comprehensive service system and address issues affecting mothers and infants with Medicaid through information sharing and networking. To complete state coverage, four new regional councils need to be established. The role of the nurse/social worker as the case manager has become more complex with the development of managed care and the increase in culturally diverse populations. Statewide case management training was conducted in five regions in 2004. Training to enhance professional skill development and quality assurance activity will be provided once funding is secured. Professional education needs identified include the legal, ethical and professional responsibilities of case managers, smoking cessation, delivery of culturally sensitive services, family violence interventions for community-based programs, research updates about effective substance abuse interventions, and tracking indicators of effective and quality outcomes.

Collaboration is being fostered among individuals and organizations statewide that sponsor community health workers, e.g., Resource Mothers, to increase access to health care services, community-based services and outreach. A Virginia Center for Sustainable Health Outreach would likely be housed at the Blue Ridge Area Health Education Center (AHEC.) James Madison University, under contract with HRSA, developed a Web-based map of existing community health workers that is updated annually. A statewide coalition is developing training in core competencies and defining evolving roles of community health workers.

An Interagency Agreement between VDH and DMAS spells out the responsibilities of each department with regard to the Resource Mothers (called Maternal Outreach in agreement) and Baby Care programs. The Interagency Agreement is on file in the OFHS.

OFHS program management staff participated in the Prenatal, Infant, Children and Special Needs (PICS) committee convened by DMAS. PICS has been instrumental in identifying best practices, developing clinical guidelines, providing education, and addressing service delivery problems for the MCH population. The PICS committee conducted a survey of providers that made it clear that providers need training on the tools used to identify depression.

The Virginia Breastfeeding Task Force (VBTF) was established in 1985 and has worked to increase the incidence and duration of breastfeeding among mothers and to provide a statewide organizational vehicle for communication, collaboration, and coordination of breastfeeding services. VBTF has endeavored to assess breastfeeding support of Virginia hospitals and offers educational services to mothers and professionals. With VDH as the lead agency, the Task Force is made up of executive officers and is essentially a volunteer group. Currently, the majority of task force members are from the health care industry, with mothers serving on the group as well. Geographic representation is limited. In the past, VBTF has embarked on several infrastructure-building activities to promote breastfeeding; to assess existing systems and collaborative mechanisms for primary and preventive services for women; and to increase medical community knowledge and support of breastfeeding.

VDH will now focus on establishing a Statewide Breastfeeding Advisory Committee. While the task force may well continue to exist independently, VDH will focus on creating a more permanent and representative Advisory Committee. The new Committee will include specifically designated representatives of professional medical organizations (APA, ACOG, Virginia Hospital Association, etc.) and high-level stakeholders with interest in breastfeeding throughout the Commonwealth. Efforts will be made to gain wider representation from other areas such as public education, workplace issues, insurance, day care centers, and research. The Breastfeeding Advisory Committee will build upon the works of the VBTF and establish a broad base with which to increase breastfeeding rates in the Commonwealth. In addition, the Committee will be actively involved in Obesity Prevention efforts in the Commonwealth through increased breastfeeding.

Established in 1999, the Virginia Council on Folic Acid (VCFA) concentrates prevention activities in three major areas: Professional Education; Community Education; and Mass Media. Professional education is addressed by presentations focused on the emphasis of folic acid and neural tube defects, folic acid exhibits at major conferences, and articles in professional journals. The VCFA has consistently participated in meetings sponsored by Virginia Pediatric Society; Virginia Dental Association; and the Virginia Pharmacists Association in addition to Virginia Academy of Family Physicians; Virginia Department of Dental Health; Neonatal Developmental Conference; and AWHONN. Community education is performed through numerous programs either within the context of their program and/or at health fairs, presentations, and conferences.

The organizations that have an ongoing commitment to the folic acid message are, yet not limited, to: Virginia Department of Health (VDH) WIC Programs; March of Dimes funded programs; Regional Perinatal Councils, Healthy Start Programs; Resource Mothers Programs; Community Voice Programs; VDH Division of Dental Health; Head Start Programs; and Care Connection Programs.

As a response to the report published by Southeastern Research Institute in 2002 evaluating the knowledge of folic acid among physicians, pharmacists, and dentists across Virginia, a new educational display was designed in Spring 2003. In the Spring 2004, the display was translated into Spanish. The display was distributed extensively to dentists (private and public health); WIC Programs; community health centers; free clinics; Healthy Start Programs; Resources Mothers Programs, and Regional Perinatal Councils in addition to other programs.

A major mass media campaign was implemented in June 2004 and February/March 2005. An advertisement stating the importance of folic acid intake for women of childbearing age was initially broadcast in the health districts with the highest rates of neural tube defects and expanded statewide (with the exception of Northern Virginia). In May 2004 the VDH folic acid Web site was updated and launched, www.vahealth.org/wic/folicacid.htm. A billboard with the folic acid message in Spanish was purchased on the Eastern Shore Route 30 for September 2004 and June/July 2005.

In July 2005, a folic acid supplement distribution program will be implemented in 19 health districts (12 health districts with spina bifida rates ≥5.24; 7 health districts with Hispanic population >24 percent for family planning patients). Over a twelve month period, women seen at family planning clinics or walk in pregnancy tests clients will receive a maximum of three bottles (100 ct./bottle) of 400 mcg folic acid.

In FY 2004, DWIH contracted with Virginia Commonwealth University to develop a compendium that reflects statistical health status information on women titled *Women's Health Virginia 2004*. The report provided a means to address two MCH priorities: 1) improve data systems and (2) improve identification of at-risk populations. The division distributed this resource to over 300 key women's health stakeholders throughout the Commonwealth for review and comment. Additionally, beginning in FY 05, as a special project to gain detailed information from various women's health professionals, focus groups are currently being conducted in each

region of the state to gain detailed information from women's health professionals related to the compendium's usefulness and accuracy, additional data sources, and perceived women's health priorities. Upon completion of the focus groups, the contracted facilitator from the University of Virginia will compile the results in a formal report. The report will be used by DWIH to assist in establishing targeted women's health priorities and strategies for improving women's health. A women's health coordinator has been hired to focus efforts on overall women's health issues within the Division of Women's and Infants' Health.

TANF funding supports local PIP programs to promote collaboration between faith-based, private, non-profit, and government organizations in their regions to reduce non-marital births. In FY 05, the programs are housed in three local health districts and nine private, non-profit provider sites. Each cooperates with local schools, colleges, job training programs, gyms, and health clinics to reach young adults to promoting the benefits of waiting until marriage to have children.

### B. Children

VDH continues to take a lead role in ensuring that all children have access to preventative and primary care medical services. These activities seek to institutionalize the necessity for and promote the utilization of a medical home for all children regardless of payor source. Beginning in 2003, VDH became a partner with the Virginia Child Health Investment Project (CHIP) and the Virginia Chapter of the American Academy of Pediatrics (AAP) to provide Virginia's practitioners with training on how to establish a family-centered medical home for children. This initial training continues to be supported by various other activities devoted to issues of both practice management and the implementation of clinical guidelines.

During the administration of Governor Mark Warner (2001-2005), significant political attention was directed toward the need for insuring Virginia's children. This attention fostered significant policy and organizational changes that significantly increased the number of insured children. Title V representatives became active members of the Virginia Covering Kids and Families Coalition that brought together both the public and private sector in support of coverage initiatives. This group also supports local coalitions in the goal of enrolling children in either the Medicaid program (Title XIX) or the SCHIP program (Title XXI). This coalition also spearheaded numerous policy goals and were successful in implementing the following changes:

- One umbrella was established for both the Title XIX and XXI programs. Branded as FAMISPlus and FAMIS, there is a "No Wrong Door" policy that allows children to be enrolled in either program through approval of one single application;
- The Employer Sponsored Health Insurance Program was redesigned to give parents of FAMIS eligible children the option to choose between FAMIS or employer sponsored health insurance if available;
- The renewal process was simplified to coordinate FAMISPlus and FAMIS renewals with food stamps or TANF recertification. A new one-page renewal application was developed;
- New methods to apply for coverage were developed. These included the incorporation of the FAMISPlus/FAMIS application form into the VDH computer system for clinic management known as WebVision. This allows the local health districts to complete an application for a family at the time that they present for services. The family is no longer referred to the Department of Social Services for an eligibility determination. In addition to this WebVision functionality, DMAS established a web accessed application process. This online functionality enrolled over 1200 children prior to any publicity on its availability; and
- DMAS instituted an internal reorganization that united all activities related to maternal and child health. Increased staff resources are now devoted to the care of Virginia's children.

Originally established in 1994, VDH and DMAS executed a revised Interagency Agreement in 2004 that focuses on the agency's responsibilities in relation to the administration of EPSDT services. These responsibilities include the sharing of data, the training of providers, and the monitoring of service delivery. Title V representatives are active trainers with DMAS on all issues related to EPSDT administration including clinical guidelines and billing practices. DMAS's training unit provides regular face-to-face trainings across the Commonwealth. In addition, DMAS holds quarterly case manager meetings that seek to enforce the necessity of a proper medical home for Virginia's children.

The scope of VDH collaboration with DSS in promoting family support has continued. In addition to outreach for Medicaid and FAMIS, the Title V program collaborates with DSS for child abuse prevention, health and safety in child care settings, and abstinence education. A

MOA with DSS provides TANF funds for the Teen Pregnancy Prevention Initiative (TPPI), the GEMS program and the Statutory Rape Awareness Program discussed under Population-Based Services. The State Appropriations Act requires VDH to evaluate the TPPI community-based programs to ensure that prevention methodologies are successful and transferable to other health districts, and to report the results of a continuing evaluation to the Governor and Chairs of the House Appropriations and Senate Finance Committees each year. Quarterly and annual reports are completed for each of the TANF funded projects.

A Title V program representative serves on the Advisory Board for the Community-Based Family Resource and Support Program and on the Governor's Advisory Board for Child Abuse and Neglect. Title V program staff also serve on review panels for grants to communities for the Virginia Family Violence Prevention Program and the Community-Based Family Resource and Support Program. These funds help support Enabling Services in some health districts.

VDH maintains MOAs with the Division of Professional and Occupational Regulation, Division of Labor and Industry, University of Virginia, and Virginia Tech to implement the Childhood Lead Poisoning Prevention Program discussed under Population-Based Services. VDH program staff provide consultation to the Joint Subcommittee Studying Lead Poisoning Prevention, a legislative committee composed of legislators, citizens, a real estate professional, an expert in developing safe building remodeling practices, a lead-abatement contractor, local government and building officials, a physician with expertise in treating lead poisoning, the Director of the Department of Professional and Occupational Regulations, the Commissioner of the Department of Labor and Industry, the Director of the Department of Housing and Community Development, and the Commissioner of Health. In addition, VDH has taken the lead on the development of a statewide strategic plan to eliminate lead as a health hazard for children less than 6 years of age by 2010. This elimination plan includes a 5-year work plan. The Lead Elimination Plan Work Group is composed of representatives of various state agencies including Medicaid, Environmental, WIC, Maternal and Child services, and also community groups, code attorneys, housing authorities, citizens, and other stakeholders. The Work Group has two Committees: Medical and Education, and Policy and Housing. The Virginia plan is posted on the CDC Childhood Lead Poisoning Prevention web site.

The Virginia General Assembly continues to support the Joint Subcommittee Studying Lead Poisoning Prevention. This Subcommittee, originally established in 1993 to study the

abatement of lead paint, has significantly broadened its focus. This Subcommittee is now a key driver promoting and monitoring interagency collaboration around various children health initiatives. The current collaborations can document a cost avoidance of over $2.5 annually by increasing agency effectiveness in service delivery.

Title V staff in the Center for Injury and Violence Prevention (CIVP) collaborates or provides leadership for several injury prevention related coalitions, teams, advisory boards and workgroups such as the Virginia NHTSA Instructors Association, the advisory committee for the Emergency Medical Services for Children Program, the Child Fatality Review Team, the Safety Management Systems Committee, AAA Safety Advisory Committee and Virginia Action for Healthy Kids. The Center also oversees the regional training of nationally certified child passenger safety technicians. Other specialized trainings pertaining to the safe transportation of children with special needs, children on school buses and those transported by child care providers are also conducted. The Center also sponsors statewide events, to inspect car seats to ensure that they are properly installed.

The Center for Injury and Violence Prevention also provides training opportunities on how to work with youth on the issue of sexual exploitation (statutory rape) and dating violence. The Center also analyzes and reports on suicide data, engages in collaborative statewide prevention planning, and coordinates public awareness activities and statewide training to school personnel, human service providers, faith communities and others on suicide prevention and intervention, including identification of persons at-risk of suicide, screening, counseling and referral. The Center's suicide prevention activities primarily focus on youth.

Healthy Child Care Virginia is a systems building initiative administered by VDH to develop integrated health, child care, and social service systems in Virginia. VDH and DSS partner closely to work with child day care providers to improve health and safety in child day care settings, supported by federal child care development funds. Most recently, VDH and DSS have joined efforts to develop an early care and education strategic plan around professional development and health and safety in child day care to provide a blue print to promote school readiness for both children and their families.

The Title V program maintains a strong collaborative relationship with the DOE, particularly with regard to school nursing services and health and physical education teachers. Collaborative activities include the developing and maintaining of the **School Entrance Health**

**Form** (revised in 2003) and the following guidelines for school health services*: First Aid Guide for School Emergencies* (revised in 2004), *Virginia School Health Guidelines* (1999), *Guidelines for Specialized Health Care Procedures* (revised 2004), *Guidelines for Managing Asthma*, and the *Helping the Student with Diabetes Guide*. DOE and VDH have also worked cooperatively on programs related to Children with Special Health Care Needs and chronic disease prevention programs such as the Diabetes Prevention Project, Asthma Prevention, and Train the Trainer for BP monitoring.

Technical Assistance and Training are additional areas where collaboration occurs. An annual needs assessment of the School Health Nurses in Virginia is conducted and the results are used to plan educational training and consultation for the coming year. The Virginia School Health Services Institute is held annually to provide training events for new School Health Nurses in addition to continuing education and training for the experienced School Health Nurses.

State Level Title V and DOE staff meet at least three times a year with school health representatives and the Virginia Association of School Nurses. Joint projects are supported such as the publication of the Annual School Nursing Services Survey, and the submission of articles to VASN to be published in their newsletter, *The Courier*. The School Nurse Institute Partnership, a partnership with VDH, DOE, VCU Partnership for People with Disabilities, seven institutions of higher learning, Virginia Association of School Nurses, and Emergency Medical Services for Children, provides statewide school nursing staff development activities and supports academic preparation of registered nurses in the specialty practice of school nursing.

The *Code of Virginia* requires each school division to have a School Health Advisory Board (SHAB) comprised of broad-based community representatives including parents, students, health professionals, and educators. SHABs assist with the development of health policy in the school division and the evaluation of the status of school health, health education, the school environment, and health services. Each board meets at least twice a year and submits an annual report to DOE and VDH, noting the status and needs of student health in its school division. In 2004 the SHABs had 100 percent compliance in filing their annual reports and were found to be effective in accomplishing their goals. Some of their noted accomplishments include school health policy development and program implementation and evaluation. The strongest areas of

focus are the parent and community involvement, health services, and health education initiatives.

The Board of Education in 2004 convened a joint subcommittee to review and make recommendations for school policies regarding nutrition and physical activity. The Board of health endorsed the set of recommendations, while the Board of Education has continued further study on the fiscal and logistical impact.

Title V staff also collaborated in 2004 with DOE staff in the development and launch of the Health Smart Virginia web site (http://healthsmartva.pwnet.org). This site supports teachers (primarily elementary school and health teachers), and school nurses with curricular resources to assist them in meeting the state standards of learning (SOL) for health. Each grade level clearly outlines the health – related SOL, and provides links to proven curricula that address those topics.

Better Beginnings Coalitions in 19 localities strive to raise public awareness on teen pregnancy and its consequences for the community. They support or develop programs to address local teen pregnancy prevention. The Title V program supports these coalitions with funding, training, and guidance.

Title V continues to partner with the Virginia Department of Social Services (DSS) in reaching child care providers. In collaboration with DSS, a 2005 calendar customized with health, safety, development, and Virginia resource information was printed and distributed to 15,000 child care providers. In another effort with DSS and the Head Start Collaborative Project, the Healthy Child Care Tool Kit is being distributed to 5,000 child care providers of all levels. This kit contains information, resources, and curriculum on items such as control of communicable disease, emergency preparedness, safe sleep environments, nutrition and physical activity, the importance of a medical home and health insurance, medication administration, and asthma. The kit provides the Bright Futures pocket guide that outlines required immunizations. Kits are distributed through face-to-face trainings statewide by child care health consultants. Attending providers receive continuing education credits required by DSS licensing. Preliminary evaluation of over 400 attendees found that 49 % were teachers and 30 % were owners/directors of child care sites. A quarterly Healthy Child Care newsletter is mailed to 10,000 child care providers throughout the state. Topics focus on timely issues including importance of

immunizations and keeping children's medical records up-to-date, health insurance, disease prevention, and working with children with special health care needs.

The Commissioner of the Department of Health serves on the Early Intervention Agencies Committee that was established in 1992 through Section 2.1-760-768 of the *Code of Virginia* to ensure the implementation of a comprehensive system of early intervention services for infants and toddlers. A representative from the DCAH is an active participant on the Virginia Interagency Coordinating Council (VICC) and the Part C Interagency Management Team. At the local level, professional staff from the health departments and the Child Development Clinics serve on the local interagency coordinating councils.

The Comprehensive Services Act for At-Risk Youth and Families provides a comprehensive, coordinated, family-focused, child-centered, and community-based service system for emotionally and/or behaviorally disturbed youth and their families throughout Virginia. One representative from VDH/Title V serves on the State Executive Council and another serves on the State and Local Advisory Team (SLAT). Other representatives from the state and local health departments serve on workgroups. All local health departments and/or Child Development Clinics serve on local community policy and management teams and family assessment and planning teams.

The Title V funded programs are also coordinated with other health department programs that serve a common population group including Immunization, STD/AIDS, and Emergency Medical Services.

Child nutrition services are monitored in conjunction with the Local Agency Management evaluations of WIC Programs across Virginia. These evaluations serve as a tool for quality assurance for public health nutrition services. A work plan for providing quality public health nutrition services is also a requirement of health districts in the annual WIC Services Plan. Local health districts must collaborate in the delivery of maternal and child health nutrition services. Such collaboration is achieved in a number of ways such as the *Healthy Habits Survey* in which a survey of the nutrition and physical activity habits of 4$^{th}$ graders across Virginia was conducted. Staff in the Division of WIC and Community Nutrition Services, who are funded in part by Title V funds, also provided training to over 900 attendees both from health districts and invitees from across the State on *Addressing Childhood Overweight in Our Communities: Training for a Public Health Initiative.* The Commonwealth's Healthy Approach

and Mobilization Plan for Inactivity, Obesity and Nutrition (CHAMPION), a process for the development of a statewide plan for addressing prevention and control of obesity in Virginia, is being led by the staff of the Division of WIC and Community Nutrition Services.

The Division of Dental Health has established a quality assurance program for public health dental services. The quality assurance review is designed to help dentists in the local health departments to comply with the standards in the Dental Health Program Guidelines developed by the Division of Dental Health and the Dental Health Advisory Committee. The district dental programs are reviewed every three years. The review results in a written report that includes the identification of any program or clinical deficiencies. The district public health dentist is required to develop and implement plans to address any deficiencies. The Division of Dental Health has a major role in the collection, analysis and reporting of oral disease data through a division epidemiologist. Studies continue to show that decay is disproportionately distributed with more than 80 percent of the decay in only 20 percent of the child population. The Dental Health Division staff provides technical assistance and training opportunities for the district public health dentist each year.

The Division of Child and Adolescent Health and the Division of Women's and Infants' Health convened the VDH Bright Futures Advisory Committee to develop, implement and evaluate a training plan on promoting the implementation of Bright Futures new child health supervision guidelines for children, from birth through adolescence. Bright Futures now serves as the expert guidelines for the district health departments' supervision for children of all ages. Title V and Healthy Start provided some initial funding for this project.

As a part of the State Early Childhood Comprehensive Systems Initiative, funded by MCHB, Virginia initiated a state strategic planning process in 2003. The process included the development of a plan to foster early childhood systems integration that would promote the health and well being of young children enabling them to enter school ready and able to learn. Five work groups that included representatives from state and local agencies, non-profit organizations, and academic institutions met to discuss and develop plans for addressing access to Medical Homes, Mental Health and Social-Emotional Development, Early Care and Education Services, Parent Education, and Family Support Services. From the five work group plans, four overarching goals have been identified: 1) access, 2) infrastructure/systems of care, 3) communication and administration, and 4) system integration. The strategic planning process

will result in a single integrated state plan that includes indicators of service system performance that may be used to track progress and efforts.

The *Code of Virginia* establishes the State Child Fatality Review Team (CFRT) and directs the team to review violent and unnatural child deaths, sudden child deaths occurring within the first 18 months of life, and child fatalities where the cause or manner of death was not determined with reasonable medical certainty. Chaired by the Chief Medical Examiner, the 16-member team includes the following persons or their designees: the Commissioner of the DMHMRSAS; the Director of Child Protective Services within the DSS; the Superintendent of Public Instruction; the State Registrar of Vital Records; and the Director of the Department of Criminal Justice Services. In addition, the Governor appoints one representative from each of the following entities for a three-year term: local law-enforcement agencies, local fire departments, local DSS, the Medical Society of Virginia, the Virginia College of Emergency Physicians, the Virginia Pediatric Society, Virginia SIDS Alliance, local emergency medical services personnel, Commonwealth's attorneys, and CSBs. Title V block grant funds provide support for a full-time coordinator for the team. This project strengthens collaboration between the CFRT and the Title V program. During the past year the CFRT has reviewed all the 2002 motor vehicle deaths to children who were injured or died in Virginia. They have also conducted a review of deaths to children from 1988-2003 who had been left unattended in cars. This year, the CFRT will publish two reports, one on caretaker homicide and undetermined child deaths and the other on hyperthermia-related injuries and deaths to children left unattended in cars.

Assessment, monitoring, and quality assurance is conducted through private and public sector activities. Through its KIDS COUNT in Virginia project, the Action Alliance for Virginia's Children and Youth analyzes and disseminates state and local data on the status of children. VDH Title V program staff serve on the KIDS COUNT Advisory Committee and assist with selection and presentation of health data. In addition, VDH's Center for Health Statistics publishes annual reports of pregnancy, birth, and death data and a special report on teen health. The Center for Injury and Violence Prevention publishes special reports and provides mortality and hospitalization injury data on request. Quantitative data on local health department services are available from VDH's Office of Information Management by special request.

Certain data however, are needed to better assess child and adolescent populations. A statewide survey of youth risk behaviors has not been conducted since 1993. Although this type

of data are recognized by many to be important for program planning and evaluation, there appears to be little likelihood that a statewide youth risk behavior survey will be conducted in the near future. However, Title V program staff have assisted local health districts or community-based organizations seeking to conduct their own surveys.

In October 2004, OFHS contracted with the Virginia Commonwealth University's (VCU) Department of Epidemiology and Community Health to employ a doctoral level MCH Epidemiologist. Some of the objectives for this position include establishing routine data analysis and reporting, developing linked data such as WIC and birth certificate data, developing standardized MCH reports, and ensuring the quality of OFHS reports. The MCH Epidemiologist has reinstituted the OFHS Epidemiology Workgroup that meets monthly to discuss data issues within the office. This position is supported by the State Systems Development Initiative (SSDI) grant.

In 2004, the OFHS contracted with the VCU's Department of Epidemiology and Community Health to analyze the Virginia Hospital Information (VHI) Patient Level Data Base to (1) describe the most common causes of non injury related hospitalizations for children aged 0-21 and (2) to summarize the trends during the years 1997 through 2002 for the most common causes of non injury related hospitalizations identified in 2003. A report titled *Injury in Virginia: Report on Injury Related Deaths and Hospitalizations 2003* was completed by the Center for Injury and Violence Prevention.

### C. Children with Special Health Care Needs

The *Code of Virginia* gives authority for the Commissioner of Health to appoint a Virginia Genetics Advisory Committee. Agencies with representatives on the committee include the Genetic Centers, Metabolic Treatment Centers, Division of Consolidated Laboratory Services in the Department of General Services, Department of Education (DOE), Department of Mental Health, Mental Retardation and Substance Abuse Services (DMHMRSAS), March of Dimes, Part C Early Intervention, Virginia Hospital and Healthcare Association, and VDH Division of Women's And Infant's Health, Division of WIC and Community Nutrition, Division of Child and Adolescent Health, Pediatric Screening and Genetic Services, Virginia Sickle Cell Awareness Program, and CSHCN Program. The Community Partners Subcommittee includes families of children with diagnosed genetic conditions. Genetics issues addressed by the committee include folic acid supplementation and media campaign, an integrated infant

screening and tracking system, and the newborn screening expanded panel of disorders. The long identified need to be better integrated within VDH has been furthered by the addition of the Director of the Division of Chronic Disease Prevention and the Director of Family Health Services to the membership of the committee.

The Virginia Early Hearing Detection and Intervention Program (VEHDIP) is guided by an active advisory committee, established by the *Code of Virginia* and appointed by the State Health Commissioner, to assist in system design, implementation, and revisions. Board representatives include the health insurance industry; physicians, including at least one pediatrician or family practitioner, one otolaryngologist, and one neonatologist; nurses representing newborn nurseries; audiologists; hearing aid dealers and fitters; teachers of the deaf and hard-of-hearing; parents of deaf or hard-of-hearing children, deaf or hard-of-hearing adults, hospital administrators; local public health departments, civic organizations, and personnel of appropriate state agencies, including Department of Medical Assistance Services (DMAS), DOE, and the Department for the Deaf and Hard-of-Hearing. The *Code* directs the DOE, the Department for the Deaf and Hard-of-Hearing, and DMHMRSAS to cooperate with VDH in system implementation.

The *Code of Virginia* gives authority for the Governor to appoint a Hemophilia Advisory Board to consult with the Board of Health in the administration of the Virginia Bleeding Disorders Program. This Board is composed of seven persons, one representative each from hospitals, medical schools, blood banks, voluntary agencies interested in hemophilia, local public health agencies, medical specialists in hemophilia, and the general public. Family participation is provided via the representative from the voluntary agency, the United Virginia Chapter of the National Hemophilia Foundation and the general public.

VDH maintains an agreement with DOE to have educational consultants as members of the interdisciplinary teams in Child Development Clinics (CDC) and Care Connection for Children (CCC) centers. The consultants provide liaison services among the clinics and centers, the children's families and local education agencies serving the children. Duties include administering and interpreting developmental and/or educational evaluations; identifying learning styles, strengths, and weaknesses; recommending educational strategies and modifications; consulting with school personnel regarding modifications in school programs; monitoring and reevaluating progress of the children; and providing staff development. DOE

provides the position and funding and contracts with a local school division to provide the supervision and fiscal management of the position. VDH provides the housing and secretarial support and participates in the evaluation of the educational consultants.

The Title V program has established and maintains ongoing interagency collaboration for systems building in some defined areas. The Title V program collaborates with DOE to develop and maintain guidelines for school health services for CSHCN, such as the *First Aid Guide for School Emergencies* (Revised 2003) and the *Guidelines for Specialized Health Care Procedures* (Revised 2004). VDH and the Virginia Chapter of the American Lung Association have established the Virginia Asthma Coalition to assess needs, share information, and collaborate on the use of available resources.

VDH maintains contracts with DMAS for CDC and CCC to provide Medicaid and FAMIS services on a fee-for-service basis. Title V program staff participate in an interagency group organized by the DMAS to discuss issues of common interest for Medicaid special needs populations.

The *Code of Virginia* establishes Community Services for At-risk Youth and their Families (CSA), a collaborative system of services and funding that is child-centered, family-focused, and community-based to address needs of troubled and at-risk youths and their families in the Commonwealth. It strives to ensure that services and funding work to preserve families and operate in the least restrictive environment while protecting children's welfare and maintaining public safety. The CSA seeks to identify and intervene early with young children and their families who are at risk of developing emotional or behavioral problems. The Act promotes increasing private partnerships in service delivery and provides communities flexibility in fund allocations and decision making while maintaining accountability. The state CSA funds are pooled from various state agencies. The pooled funds include VDSS state and local foster care and purchased foster care funds, 286 and 239 special placement funds from the Department of Juvenile Justice, Department of Education's private tuition funds, and the DMHMRSAS funding for purchased beds for adolescents. There is a local cash match required to access the state CSA funds. Children who would have been served by one of these funding streams are designated as targeted for priority services.

CSA has formal structures for interagency collaboration to address systems issues. The commissioners from VDH, DMHMRSAS, and VDSS; the Superintendent of Instruction; the

Executive Secretary of the Virginia Supreme Court; the directors of the DMAS and Department of Juvenile Justice; an elected or appointed local official; a private provider representative as a non-voting, ex officio member; and a parent representative serve as the CSA State Executive Council. In addition, representatives from these agencies and groups comprise a State Management Team, the State and Local Advisory Team (SLAT), Community Policy and Management Teams (CPMTs), and Community Family Assessment and Planning Teams (FAPTs). Title V program staff represents VDH on the State Executive Council, SLAT, and the State Management Team. Local health department staff serves on the local CPMTs and FAPTs.

The Title V program currently coordinates health services on an individual basis for CSHCN through its Care Connection for Children centers, Child Development Clinics, Virginia Bleeding Disorders Program, Comprehensive Sickle Cell Centers, Genetics Centers, and Metabolic Treatment Centers. These programs are described under Direct Services and Population-Based Services.

As result of the 1999 Virginia CSHCN Task Force study findings and recommendations, six CSHCN Centers of Excellence have been established with performance-based contracts negotiated between the state and regional entities (tertiary centers and health districts) to manage the centers. These centers, called Care Connection for Children, assist families in accessing specialty medical services and a medical home, promote institutional leadership in the areas of improved coordination between primary and specialty care, improved care coordination, and quality improvement activities, such as CSHCN provider continuing education, regional needs assessment, and systems-related studies of issues of concern to CSHCN and their families.

Formal statewide mechanisms in communities for coordination and service integration among programs serving CSHCN are in place to young children with special developmental needs. The *Code of Virginia* creates the Virginia Interagency Coordinating Council (VICC) to promote and coordinate early intervention services in the state. The VICC is comprised of parents of infants and toddlers with disabilities, public or private providers of early intervention services, a Virginia General Assembly member, representatives from relevant state agencies, and a Head Start agency or program member. Title V staff provide VDH representation on the VICC.

The *Code* also provides for local interagency councils on a statewide basis to advise and assist the local lead agencies and to enable early intervention service providers to establish

working relationships that will increase the efficiency and effectiveness of those services. Membership on the local councils includes designees from the local Community Services Board, health department, VDSS, and school division as well as community service providers and at least one parent. VDH and other participating agencies maintain a MOA with the DMHMRSAS for participation in the IDEA-Part C service system, including coordination and utilization of available services for children birth to three years of age at the community level.

## VI. Needs Assessment Summary and State Priorities

In order to identify and prioritize the issues that are affecting the MCH population in Virginia, an assortment of data collection and analysis activities were conducted that included both quantitative and qualitative data. Numerous secondary data sets were obtained, such as health statistics, hospital discharge, and client level service data to investigate trends and other issues affecting the MCH population.

In addition to the quantitative data that was analyzed and reported, additional activities occurred to collect qualitative data in order to provide a more complete picture of the issues affecting the MCH population. These activities included public hearings with individuals in the community, focus groups with representatives from each of Virginia's seven regional perinatal councils, key informant interviews with key MCH stakeholders, and an online survey of individuals and organizational representatives who have an interest in issues affecting the MCH population. In addition, a CAST-5 assessment was conducted in September 2004 to identify the Office of Family Health Services specific strengths and weaknesses in addressing the issues affecting the MCH populations.

The needs assessment data that was collected and analyzed by OFHS staff were summarized and organized into a data book that was sent to the Title V priority setting meeting attendees prior to the meeting. This provided the opportunity for individuals to review the most current data and to begin to think about the types of priorities that would be appropriate for the MCH population in Virginia over the next five years.

In the priority setting meeting facilitated by Dr. Donna Petersen, OFHS staff and their external partners developed the Title V priorities. The group identified priorities based on the needs assessment data and their personal knowledge of issues that are impacting the health of Virginia's women and children. There was much discussion about how Virginia can improve access to health services and health insurance and improve the quality of health services that are important for Virginians.

Specific national performance measures are in place to determine our progress as we address these issues in the MCH population and specifically in children with special health care needs (CSHCN). National performance measures also show how well Virginia is identifying at-risk populations and assuring linkages with prevention, early intervention and family support services.

While public health and the Title V program have assumed the role of enhanced assessment, quality assurance, and redesigning the public health infrastructure, part of improving access to health services still requires direct service. Meeting the needs of vulnerable populations, such as CSHCN and uninsured pregnant women has not relieved health departments from providing direct services. While the number of patients served by clinics has decreased, particularly for Medicaid clients, health departments still operate as medical care providers and function as a safety net in many communities with limited resources. Maintaining reduced or basic services requires a base staffing level. As in the past, Title V remains a primary funding source for clinical preventive care services for pregnant women, infants and children for low-income populations, as well as providing care coordination services for CSHCN through the Care Connection for Children network.

The key stakeholders identified the need for increased and improved communication, leadership and improved planning, resource development and sharing. They indicated that state government should provide the **leadership in creating partnerships with and between community organizations**. The key stakeholders also identified the need to increase collaborative activities to address identified community needs. The CAST-5 assessment of the Title V program identified collaboration and connection with stakeholders as a program strength, but indicated that weaknesses included inadequate intra-agency organizational structures for partnerships and inadequate stakeholder involvement in key areas. An overall theme identified in the CAST-5 assessment was the need for a greater leadership role in developing stronger, collaborative intra-agency and interagency systems of care that are focused on and organized around serving similar populations.

The need for partnerships becomes more crucial as resources become more limited and the need to share expertise to develop more integrated programs that address the multiple needs of women and children becomes more evident. During the next year, OFHS will identify specific partnerships with agencies and organizations that will be beneficial to addressing the needs and women and children and develop a plan for increasing communication and coordination around specific health improvement efforts. Efforts directed by this priority will be focused on infrastructure building to better meet the needs of women and children, including CSHCN, through collaborative partnerships.

One of the most vulnerable populations, CSHCN, remains as a major priority, receiving a large proportion of Title V funds. Numerous special health care needs, e.g., emotional disturbance, asthma, and sickle cell anemia, affect thousands of Virginia children. The Title V program assures and coordinates health services on an individual basis for low-income families with CSHCN through its Care Connection for Children network, Child Development Clinics, Genetics Centers, and Metabolic Treatment Centers. The Newborn Screening Program, Sickle Cell Program, Virginia Newborn Hearing Screening Program (VEHDI), and the Virginia Congenital Anomalies Reporting and Education System (VaCARES) help identify CSHCN. Improving identification of "at-risk" populations and assuring linkages with prevention, early intervention, and family support services is extremely important and can only be successfully accomplished through the development and nurturing of partnerships that promote systematic communication, coordination, shared resource allocation and education around health improvement efforts. Several national performance measures will be used to monitor the progress on this priority.

As in the previous needs assessment, the availability of **data for program planning, policy development, evaluation and decision-making** remains a high priority for Virginia's Title V program. Accurate and successful assessment requires reliable, quality data. To meet this need Virginia will make enhancing data collection and dissemination a priority again this year. Virginia's MCH program recognizes the necessity for improving data systems, analysis and reporting capacity to ensure meaningful and quality surveillance of maternal and child health populations and health outcomes for use in the development of programs and policy in the coming years. This year's needs assessment process identified gaps in data for measuring health behaviors among pregnant women and adolescents specifically. Virginia will continue critical work to increase its data capacity in these areas. The Virginia MCH program will continue to look for opportunities to partner with other agencies such as the Department of Mental Health, Mental Retardation and Substance Abuse Services to collect data on youth risk behavior and will continue to advocate for Virginia's participation in the Youth Risk Behavior Surveillance System. Virginia plans to apply for funding for the Pregnancy Risk Assessment Monitoring System (PRAMS) when it is available.

Both individual and organizational respondents to the needs assessment online survey indicated that the health department needed to ensure that health programs are working and

needed to inform and educate the public and families about health issues and prevention. They also expressed the need for the Title V program to take a more active role in overseeing the health status of children, adolescents and women by monitoring the resources available to the community. The key stakeholder interviewees also expressed a desire for easily accessible data on the populations served by the Title V program and the need to be informed about what data are being collected. Available data, both at the state and local level, is crucial when addressing infrastructure issues relating to focused planning and implementation of successful programs to address the needs of women and children. The CAST-5 assessment identified the need for better data collection, analysis and use to 1) inform programmatic decision-making, 2) enhance accountability and quality improvement in the OFHS programming particularly with regard to the local level, 3) drive improvements in MCH outcomes, 4) better identify emerging public health issues, and 5) educate key stakeholders about the work of OFHS

Under an expanding role for quality assurance and monitoring, a public health primary function will be to provide appropriate and timely data. Title V programs have undertaken significant efforts to improve data collection systems and the ability to analyze, disseminate, and utilize data to assist those serving maternal and child health populations. The ability to share data to address public health needs has become a priority among top levels of state government facilitated by passage of legislation in 2002, which provides for data sharing among state agencies. With this new level of interagency cooperation, the Title V program will increase its capacity and function in assuring that public health needs are identified and addressed. In addition, the State Systems Development Initiative (SSDI) grant addresses the issue of data linking. Virginia's MCH Epidemiologist, funded by SSDI, will be working during the coming years to provide linked data in order to better monitor issues affecting the MCH population. This will provide a greater understanding of the needs of this population as well as increase OFHS infrastructure services.

The key stakeholders interviewed during the needs assessment process indicated that there is a growing number of persons, particularly the uninsured and Medicaid recipients, who are experiencing limited access to medical and dental care. The perinatal focus groups indicated that the greatest barrier for women receiving prenatal care was the lack of access to an affordable health care system in a timely manner. Underinsurance remains a critical issue especially for CSHCN. The online needs assessment survey found that both individual and organizational

representatives ranked the **lack of health insurance coverage or sufficient coverage for children and women** as the second major health issue. In 2004, 13 percent of Virginia women did not have health insurance. Hispanic women were least likely (65 percent) to have health insurance then white women (90 percent), other racial and ethnic women (85 percent), and black/African American women (82 percent). The percentage of children without health insurance in Virginia varies depending on the data source used. The range is between 7 percent and 14 percent. In addition, there is a growing concern regarding non-English speaking and immigrant women's and children's access to health related services, particularly linguistically and culturally appropriate services.

Insurance status remains a prime indicator for health care utilization as evidenced by survey and birth certificate data. Improving access to quality health care services remains a priority. Improvements have been observed in the proportion of uninsured children, but the underutilization of insurance available for children in low-income working families remains a focus for future efforts. Reducing delays in obtaining Medicaid and thereby increasing the likelihood that early prenatal care will be obtained also continues to be important. Medicaid patients, and those with no payment source, have exhibited poorer care utilization and outcomes. VDH will continue working with the interagency group, Prenatal, Infant, Children and Special Needs Committee (PICS), to designate priority areas, enhance a coordinated infrastructure, and provide a forum to make systems-based changes. As a result of changes to FAMIS and the FAMIS enrollment process, the number of enrolled children has increased significantly. Additional efforts addressing this priority include referring patients to Medicaid and FAMIS and assisting CSHCN families in finding insurance (enabling services) and continuing to monitor the insurance status of the vulnerable populations (infrastructure building services). NPW # 4 will be used to specifically monitor the percent of CSHCN that have adequate insurance.

The Center for Injury and Violence Prevention (CIVP) has been analyzing injury related deaths and hospitalizations since 1994. In 2000 -2002, unintentional injuries were the leading cause of deaths for persons aged 1 to 64. Unintentional Injuries accounted for 52 percent of all deaths that occurred among persons aged 15 to 19. The majority of these deaths are preventable. In 2003, 57 intimate partner homicides occurred in Virginia. Nearly four of every five victims were women and three of the victims were children under the age of 18. Reducing mortality and morbidity from injury and violence is an important public health issue. In addition to

unintentional and preventable injuries, there is a need for continued efforts to promote healthy behaviors to reduce significant causes of morbidity and mortality. Specifically, concerns relating to injury, violence, and obesity were identified in the needs assessment. The key stakeholders identified the need for expanded prevention and education services for children relating to health issues, specifically the need for increased education for the prevention of risky behaviors among adolescents. The online survey identified obesity, domestic violence and child abuse and neglect as major health issues. The public hearings identified the need to improve training of health professionals in screening for and identifying violence and sexual abuse and to increase individual's access to forensic nurse examiners.

The Title V program will continue to play an important role in educating the public on topics such as use of child safety seats, bike helmets, and healthy lifestyles including nutrition and physical activity. Partnering with other agencies and coalitions provide important avenues for the **development and distribution of prevention messages**. Also engaging in school-based programming reaches large numbers of youth that are at risk for injuries and unhealthy lifestyles. Potential activities to address this priority include continuing **population-based prevention education and provider training** on the identification of violence and appropriate documentation and referral.

The concept of having an **on-going source of primary care for women** is also an important way to ensure that women receive comprehensive care that is easily accessible, coordinated and culturally appropriate. Stakeholders in the priority setting meeting discussed the importance of extending the concept of "medical home" to women to ensure that they have an ongoing source of care. A nationwide survey from the National Women's Health Resource Center (NWHRC) strongly suggests that women often place a greater priority on the health of their family than their own personal health. The survey data also suggests that health care professionals could do a better job of communicating to women about the importance of both physical and emotional health and ways to improve their health. Women need to be educated about the importance of health and prevention of chronic diseases over the life span. Efforts such as the Bright Futures for Women's Health Initiative and WISEWOMAN are good models to increase women's use of preventive services, educate women about the importance of making good health care decisions, and increase practitioners' use of preventive guidelines. Although the Title V focus is on children and women of childbearing age, taking a life-span holistic

approach recognizes the importance of overall health and the impact that may have on pregnancy. Some activities related to this priority include educating women on the importance of total health, the prevention of chronic diseases for themselves and their children and educating providers on the importance of using preventive guidelines. Other activities include the promotion of aggressive management of chronic diseases such as diabetes during and after pregnancy, and promoting preconceptual and interconceptual health, especially as it relates to their baby's health once pregnant.

Having a medical home has been identified as an important way to ensure that children and especially CSHCN receive the comprehensive care that they need. In the medical home concept a physician provides primary care that is easily accessible, family centered, coordinated, and culturally appropriate. The physician is viewed as a partner with the family to assure that medical needs are met and that specialty care and other services that improve the overall health of the child and family are provided. In 2003, 54.5 percent of Virginia CSHCN and 75 percent of children and adolescents received coordinated, ongoing, comprehensive care within a medical home. The key stakeholders and the public hearing participants identified the need for increased access to care and the need for coordinated and culturally appropriate care. **Expanding the availability of medical homes** was identified in the priority setting meeting as a way to assure that children and families would receive comprehensive and culturally appropriate services. Some activities related to this priority include collaborating with other community agencies to expand the availability of medical homes (infrastructure building services) and working with families to ensure that children are referred to a medical home (enabling services). NPM # 3 will be used to monitor the progress on this priority for CSHCN and SPM # 1 will be used to monitor the progress for children and adolescents.

In 2000, the first Surgeon General's report on oral health identified a "silent epidemic" of dental and oral diseases that burdens some population groups. Oral diseases can place a major burden on low-income and underserved individuals in terms of pain, poor self-esteem, cost of treatment, and lost productivity from missed work or school days. Although a dramatic decline in dental caries rates has occurred over the past several decades, many Virginia children still suffer needlessly from preventable oral diseases and conditions. Dental caries remains the most common chronic disease among U.S. children. Dental disease and access to dental care is a chronic problem among low-income populations in Virginia. Studies continue to show that decay

is disproportionately distributed with more than 80 percent of the decay in only 20 percent of the child population. Dental surveys conducted in the Commonwealth have consistently shown that low-income children and adults have higher dental disease rates and less access to dental services. A statewide disease assessment in 1999 of more than 5,000 children showed that children on the free lunch program have higher disease rates, fewer dental sealants and lower filling needs met than their counterparts. This trend has also been confirmed for adults in the collection of data through the Behavioral Risk Factor Surveillance System Survey.

In the Title V Public Hearings, the need to **increase access to dental services** for women and children was identified. The lack of access to dental care was also a finding from the Key Stakeholders interviews and was identified as the most needed but not received service for children by respondents to the Title V online survey. Dental service for low-income pregnant women is a specific need since Medicaid does not cover this service and there is research that supports the conclusion that there is a relationship between dental health and pregnancy outcomes. The Division of Dental Health's approach to this includes infrastructure-building services such as oral health surveillance, policy development, recruitment of public health dentists and providing dental student scholarships. In addition, the Division also maintains a quality assurance program for public health dentists. Population based services include dental education, community water fluoridation, and the fluoride mouth rinse program for selected schools. In addition, a number of local health departments provide clinical dental services

The public hearing participants identified the need **for greater access to mental health services for women and children**. The key stakeholders also indicated that mental health and substance abuse services are in short supply especially for low-income women and children. According to feedback received during the perinatal focus groups, women with mental health or substance abuse problems were one of the sub-populations not receiving appropriate prenatal care. Both the individual and organizational respondents to the online survey identified behavioral health issues as the third highest health issue for children and depression and mental illness as the third highest health issue for women. Although there was agreement regarding the great need for additional mental health services, much of the discussion at the priority setting meeting focused on the determination of the role for the Title V program. Some of the proposed approaches included raising public awareness of the impact of mental health on overall health and the importance of viewing mental health from a public health perspective. Another approach

is for the Title V program to partner with mental health to increase health care providers skills and knowledge of screening and referral for mental health/substance use issues. The new curriculum developed for providers to learn more about perinatal depression will assist in achieving this goal in coming years. The Title V program can also help to facilitate enhanced relationships between the local health departments and the Community Services Boards and be an advocate for increased mental health services for children including CSHCN.

The percentage of women who begin prenatal care during the first trimester has remained steady since 1999. Overall, 85 percent of women begin prenatal care during the first trimester, however, the rate varies by race and ethnicity. For example, in 2003, 71.1 percent of Hispanic women and 77.2 percent of black women began prenatal care in the first trimester. Like many other states, Virginia is experiencing what many people have referred to as a crisis in access to obstetrical care. The effects have been felt most in rural areas, but suburban and urban communities are also experiencing the effects. Several small community hospitals no longer provide obstetrical care and some obstetricians have stopped providing coverage for family practice physicians who have been delivering babies or have stopped providing supervision of certified nurse midwives. Some OB/GYNs have limited their practice to gynecology due to the prohibitive cost of malpractice insurance premiums. This has resulted in women having to travel further to the hospital or delivering their babies in the emergency rooms. Women in these rural areas also find it difficult to receive adequate prenatal care. The key stakeholders identified **access to obstetrical and other perinatal services** as scarce for the generally low-income population and for rural and minority residents. They considered prenatal care as a critical need for women of childbearing age. The perinatal focus groups indicated that the availability of prenatal care varies from locality to locality and differs widely by demographic group and access to a payment source. They indicated that most low risk pregnant women are receiving services but they often are not getting care in a timely manner. This sometimes results in the low risk pregnant women becoming high risk. The online survey respondents identified the lack of prenatal care as being on of the top five health issues for women. Some of the efforts will focus on educating targeted populations on the importance of prenatal care (population based services) and using lay home visitors and outreach activities to increase prenatal care (enabling services). The current Resource Mothers Program is a successful example that could be expanded to increase the number of women who receive early prenatal care.

Respondents to the online survey conducted as a part of the Title V Needs Assessment identified **obesity/overweight** as the top health issue for both children and women. National data also supports this as a significant health issue. Over the past decade, overweight/obesity has significantly increased in children living within the Commonwealth of Virginia. According to the National Survey of Children's Health (SLAITS) in 2003, almost one-fourth (24%) of Virginia's children are overweight and 15% are at risk for being overweight. Being overweight has been associated with elevated serum levels of total cholesterol, and overweight children are reported to be at a much greater risk than non-overweight for Type 2 Diabetes. Addressing this issue can reduce the future number of adults that suffer from many chronic diseases such as diabetes and cardiovascular disease and the accompanying health and financial burden associated with these diseases. Lack of regular physical activity, accessibility to calorie dense foods (candy, chips, soft drinks), larger portion sizes, family lifestyles and lack of interest in health and media messages contribute to the childhood overweight dilemma. In addition, many children live in areas that are not conducive to safe physical activity. This approach to the overweight issues includes population-based services such as public awareness and education as well as infrastructure level approach to monitor obesity data and policy development.

Based on the needs assessment and the priority-setting meeting, these are Virginia's Title Priorities that were developed:

| Priority | Definition |
|---|---|
| 1 | Exercise leadership in nurturing partnerships that promote systematic communication, coordination, shared resource allocation and education around health improvement efforts |
| 2 | Enhance data collection and dissemination efforts to promote evidence-based decision making in planning, policy, evaluation, allocation and accountability |
| 3 | Assess and develop strategies to address underinsurance for vulnerable populations to improve access to affordable, acceptable care |
| 4 | Evaluate, coordinate and enhance provider education in risk assessment, documentation, intervention, treatment and referral consistent with evidence-based standards of care around health issues specific to women and children |
| 5 | Advance a holistic continuum of care model for women's health services across the life-span toward improvements in health for women, their children and their families |
| 6 | Expand availability, quality and utilization of medical homes for children |
| 7 | Improve access to dental care, awareness of oral health, and application of new models in dental health services |
| 8 | Incorporate mental health into relevant preventive health efforts in MCH; participate in efforts to promote availability and quality of mental health services and facilitate links between the mental health and health care communities |
| 9 | Improve access to prenatal care including appropriate genetic assessment and breastfeeding support for all women across the state |
| 10 | Apply socio-ecologic models to promote healthy weight by encouraging appropriate nutrition and safe physical activity efforts |

# APPENDIX A

# Maternal and Child Health Needs Assessment

# Interviews of Key Stakeholders

## Introduction

The Virginia Department of Health's (VDH) Office of Family Health Services (OFHS) contracted with the Central Virginia Health Planning Agency (CVHPA), a non-profit organization with expertise in health planning and needs assessment, in September 2004 to perform a qualitative needs assessment of populations served by Title V (Maternal and Child Health Block Grant) funding. This needs assessment includes a focus group in each of the seven perinatal regions; interviews of key health provider, governmental, and organizational stakeholders that are involved with maternal and child health issues; as well as a public hearing in each of the Virginia's five health planning regions to solicit community input relative to maternal and child health needs and resources.

The interviews of twenty-seven key stakeholders for this needs assessment were conducted from January through March 2005, by Karen Cameron, Executive Director, and Elizabeth Farrell, Assistant Director, of the Central Virginia Health Planning Agency, Inc. The key stakeholders included representatives from the following agencies and organizations:

Virginia Commission on Youth
Parish Nurse Consortium
Women's Health Virginia
VCU, Department of Human Genetics
Eastern Virginia Medical School
Virginia Dental Association
Virginia Department of Health
UVA, Dept. of Emergency Services
VA Department of Social Services
Parent to Parent of Virginia
VA Chapter of the AAP
Department of Medical Assistance Services
Voices for Virginia's Children
VA Primary Care Association
VA Poverty Law Center
DMHMRSAS
Virginia Health Care Foundation
Northern VA AHEC
Secretary of Health and Human Resources
Children's Hospital of the Kings Daughters

**Summary of Findings**

The interview protocol used to solicit input into this needs assessment of maternal and child health in Virginia was structured to illicit responses relative to the overall environment as it related to children and families, information relative to the specific populations served by Title V funding, the role of the OFHS relative to meeting the needs of these populations, and how could OFHS better work with those within and outside of the Virginia Department of Health. Several themes emerged from these interviews:

- Growing numbers of persons, particularly the uninsured and Medicaid recipients, are experiencing limited access to medical and dental care services.
- Obstetrical and other perinatal services are particularly scarce for this generally low-income population but also for rural and minority residents who may not necessarily be low-income.
- The growing cost of health care and the impact on health insurance costs threatens to result in more people, particularly lower income, being uninsured.
- The growth in enrollment in Virginia's state children's health insurance program (FAMIS) has had a positive impact on getting needed services to children, but there is a critical shortage of pediatricians, pediatric specialists, support services, and dentists in many areas willing to serve these and children with Medicaid coverage, generally because of low relative reimbursement.
- In addition to dental care, mental health and substance abuse services are in particularly short supply for low-income women and children.
- There is growing concern regarding immigrants' access to the myriad of health related services, particularly linguistically and culturally appropriate services.
- The need for prevention and early intervention services was often noted, particularly for infants and children, whereas education and initiatives regarding health issues, particularly those aimed at risky behaviors, was noted as being needed by adolescents.

- Disabled children particularly appeared to need improved identification and coordination of needed services.
- For women of child bearing age, prenatal care and family planning services are viewed as critical needs.
- As expected, low income and/or uninsured people and minority populations were of particular concern relative to getting their health needs met.
- For infants and children, the VDH is viewed as doing a good job relative to immunizations and WIC/nutrition, with the Bright Futures program and New Parents kit being specifically mentioned.
- VDH's Care Connection for disabled children was mentioned as being particularly effective.
- Family planning, STD testing, and prenatal care (when available) at the local health departments generally are viewed favorably by those interviewed.
- The greatest areas for improvement by VDH (relative to women's and children's services) overwhelmingly appear to be in ensuring the availability of providers and services, as well as their coordination, and in increased collaboration both internally and within communities.
- Specific suggestions centered on increased and improved communication, leadership and improved planning, and developing additional resources (financial, data/information, and services).
- Overwhelmingly, those interviewed identified the state government as needing to provide resources and leadership in planning and creating partnerships while local governments were viewed as being able to provide collaborators, assisting in need identification and planning, and providing some resources.
- Communities (including non-profit organizations, faith-based organizations, and others) were seen as key to effective collaboration and implementation of services whereas there

appeared to be support for private providers becoming partners and sharing in the provision of services and promoting health education to all members of the community.

- The greatest barriers to accomplishing real improvement in the health of women and children are the perceived lack of political will and commitment by leadership at all levels (state, local, and community), largely because of changing priorities and leaders, and the lack of and/or poor use of resources for health improvement.

- When questions were asked specifically about the OFHS, sometimes it appeared that the answers were more about VDH than OFHS specifically, usually because the individual did not know the difference between the activities of one office versus another. However, the OFHS activities that had the greatest support included: data surveillance, research, and program evaluation; fostering collaboration; developing coordinated services statewide; and community education and outreach.

- Ways in which OFHS could better collaborate included significant support for increasing communication and/or outreach activities and increasing collaborative activities to address identified community needs.

- Many organizations do not collect data and/or have specific databases concerning the population they are serving. Many noted the need for easily accessible, specific data on the populations served by OFHS and the need to know about what data are being collected.

Overall, it appears that there is significant support for increased, focused planning and implementation using community collaboratives. Those interviewed appeared to view VDH/OFHS' role as needing to provide leadership to these efforts, particularly in the areas of planning, resource development, and communication. Selected service provision through local health departments was also supported, particularly in the role of coordination and case management in the provision of perinatal services. However, above all, it appeared that most interviewed thought that it is VDH's responsibility to ensure that there is a "safety net" for all Virginians, but not necessarily in providing all of the services that make up that net.

# APPENDIX B

# Maternal and Child Health Needs Assessment

# Regional Public Hearings

## Introduction

The Virginia Department of Health's (VDH) Office of Family Health Services (OFHS) contracted with the Central Virginia Health Planning Agency (CVHPA), a non-profit organization with expertise in health planning and needs assessment, in September 2004 to perform a qualitative needs assessment of populations served by Title V (Maternal and Child Health Block Grant) funding. This needs assessment includes a focus group in each of the seven perinatal regions; interviews of key health provider, governmental, and organizational stakeholders that are involved with maternal and child health issues; as well as a public hearing in each of the Virginia's five health planning regions to solicit community input relative to maternal and child health needs and resources.

The five public hearings were conducted during the month of April 2005. The CVHPA worked with the other four regional planning agencies to arrange a publicly accessible and convenient meeting place for each region's public hearing. An interested parties list was compiled by the OFHS, in cooperation with the regional planning agencies. A letter from the Director of the OFHS and a flyer, providing details about the public hearings, was sent to each party on the list. In addition, information was provided to the media throughout the State by the VDH's public information officer in advance of the public hearings. The following is a summary of the overall findings from the hearings.

## Summary of Findings

Not only did these public hearings provide a forum for feedback from Virginia's communities into this maternal and child needs assessment, but it also appeared to provide an important vehicle for those present to learn about the populations served and the services available from the OFHS. There were a wide variety of concerns and suggestions regarding the health needs of women and children and the best ways to meet them. The following summarizes these needs and

issues that were mentioned in more than one region of the State, ordered on their general frequency of mention (the areas where they were mentioned are shown in parentheses):

- Increase the capacity for health services, including the number of available providers to lower-income persons, increasing eligibility for Medicaid for pregnant women to 200 percent of the federal poverty level, consistent treatment for chronic illness, and increased prenatal services (Central, Southwest, Eastern, Northern, and Northwest).

- Increase access to home visitation programs, such as resource mothers, to pregnant women and new mothers (Central, Eastern, Northern, and Northwest).

- Increase financial support for community partnerships of local health departments and/or organizations to meet community needs (Central, Southwest, Northern, and Northwest).

- Educate the community regarding resources available to meet their health needs, including those for special needs children, pregnant women, and/or domestic violence and sexual abuse (Central, Southwest, Eastern, and Northwest).

- Increase access to mental health services for women and/or children (Central, Eastern, and Northwestern).

- Increase access to dental services for women and/or children (Southwest, Eastern, and Northwest).

- Increase support for and availability of community-based specialized services (including Community Care Connection) for special needs children, as well as special needs adult women (Central, Northern, and Northwest).

- Increase services for non-English speaking and immigrant women and/or children, including health services, translation services, and/or cultural awareness (Central, Southwest, and Northern).

- Improve training of health professionals in screening for and identifying domestic violence and sexual abuse and increase access to forensic nurse examiners (Southwest and Eastern).

- Improve data collection and distribution. Some specific suggestions included improving the timeliness and affordability of available data, collecting information relative to outcomes from childhood immunizations, and the need for statewide FIMR data (Central and Northern).

- Emphasize/educate women regarding the importance of health during pregnancy and early childhood (Southwest and Eastern).

# APPENDIX C

# Maternal and Child Health Needs Assessment

# Focus Groups of Virginia's Regional Perinatal Councils

## Introduction

The Virginia Department of Health's (VDH) Office of Family Health Services (OFHS) contracted with the Central Virginia Health Planning Agency (CVHPA), a non-profit organization with expertise in health planning and needs assessment, in September 2004 to perform a qualitative needs assessment of populations served by Title V (Maternal and Child Health Block Grant) funding. This needs assessment includes a focus group in each of the seven perinatal regions; interviews of key health provider, governmental, and organizational stakeholders that are involved with maternal and child health issues; as well as a public hearing in each of the Virginia's five health planning regions to solicit community input relative to maternal and child health needs and resources.

From late October through the end of November, the CVHPA staff conducted a focus group with representatives from each of Virginia's seven regional perinatal councils. Each focus group included a representative group of persons involved with each perinatal council to provide opinions on needs and gaps in service, as well as the current structure of perinatal service delivery in the State. The following provides an overall summary of the findings from the seven focus groups. It is important to note that these reflect opinions and circumstances at a particular point in time and policies/practices/circumstances may have changed slightly since the focus groups were conducted.

## Summary of Findings

The following is a summary of the findings statewide. Note that each perinatal group provided detailed information for their area relative to these and other issues and provided concrete suggestions on how to better meet the needs identified.

- The primary concern was access to care overall, but particularly for women with limited financial resources. Moreover, between and within regions there is often great disparity in the availability of perinatal services from locality to locality.

- Overall, it appears that most low risk pregnant women are receiving services but they often are not getting them in a timely manner. As a result of this wait, it was noted that some low risk pregnancies become high risk. Again, access differs widely by demographic group, access to a payment source, and geographic residence.

- Most high-risk women are getting into appropriate care, but sometimes care is delayed due to transportation issues, a lack of specialty providers in an area, or patients not recognizing a need for services. Specifically mentioned was a shortage of services for pregnant women who are substance abusers and those with gestational diabetes.

- Overall, it is reported that most women who are referred for prenatal care continue to receive care. However, there are special populations and/or life situations that often result in missed appointments.

- Generally women are not receiving appropriate prenatal services. Again, there is variation based on geographic location and socio-economic group.

- Overall, neonates are getting appropriate services at birth but sometimes have difficulty receiving follow-up care.

- The following characteristics were associated with women and children not receiving appropriate care:
    - Uninsured,
    - Medicaid recipients,
    - Low income,
    - African American,
    - Non-English speaking,
    - Teens,
    - Limited or no access to transportation,
    - Those with mental health or substance abuse problems, and/or

    - Those living in rural areas.

- All regions cited premature and low birth weight infants and infant mortality, particularly among African American mothers, increased emergency department visits, more and longer hospitalizations, and delivery complications, as consequences of mothers and/or infants not receiving appropriate care. The Social Services system can be overwhelmed by the ongoing needs of these infants and their families. This translates into higher cost not only associated with the birth but ongoing costs associated with the health, welfare, and educational needs of the children born.

- The biggest barrier appears to be the lack of availability of timely access to an affordable health care financing system by all women, regardless of income and citizenship, which reimburses adequately for providers to be willing to deliver quality obstetrical and neonatal care, and associated support services, statewide. This includes culturally competent, comprehensive (including behavioral health, dental services, and case management) and coordinated care.

- The quality of the physicians and other health care providers, coordination of services/referrals between providers, and the educational programs that were brought to community providers from the perinatal centers are seen as the greatest strength of the perinatal system across the State.

- The lack of community-wide access in all regions to obstetricians and nurse midwives was cited as the primary weakness of the current perinatal system.

- Overall, Medicaid managed care plans often do not provide for coordination of care nor insure that all needed services are available in the community under their plan.

- In the regions with more competing hospital systems, patients are not always appropriately transferred to the perinatal center, sometimes resulting in sicker mothers and/or infants.

- Regionalization of perinatal care was seen to be valuable in all areas but with challenges to overcome in some regions. It was seen as particularly valuable in providing educational and referral sources to local areas.

- All groups thought that the regional perinatal councils had inadequate resources to meet the needs of their communities. Resources were needed for:
    - Personnel to conduct outreach, screenings, and health education;
    - Increased technical assistance to document trends and outcomes;
    - Development of referral sources for substance abuse, mental health, etc;
    - Educational resources, such as training videos and support;
    - Public health education and pregnancy prevention; and
      Research and implementation of "best practices."

# APPENDIX D

# Maternal and Child Health Needs Assessment Survey Highlights

VDH VIRGINIA DEPARTMENT OF HEALTH
*Protecting You and Your Environment*

**Office of Family Health Services**
**June 2005**

As the state's Title V agency, the Virginia Department of Health (VDH) is required to conduct a comprehensive needs assessment every five years to identify state Maternal and Child Health (MCH) priorities and develop programs and policies that address these priorities. In order to obtain useful information from the community, the Office of Family Health Services (OFHS) conducted a survey of both individuals and organizational representatives. The survey assessed the health status, risk factors, and the availability and accessibility of quality services for MCH populations.

### Respondent Profile

Individuals were most likely:
(N=194)

- 26 to 44 years old
- Female
- White/Caucasian

Organizations mostly:
(N=69)

- Served MCH populations
- Served 2,500 or more clients per year
- Represented community-based organizations, health care providers, or local and state government

### Top 5 Major Health Issues

*For Children/Teenagers:*

- Overweight*
- Health insurance coverage*
- Behavioral health issues*
- Unintended pregnancy
- Child abuse/neglect

*For Women:*

- Obesity*
- Health insurance coverage*
- Depression/mental illness*
- Domestic violence*
- Prenatal care*

*Cited by both individual and organizational respondents.

### Respondents top sources of health advice/ information

- Health care provider
- Internet
- Local/state HD

### Types of health advice or information sought by individual respondents

- Health insurance coverage
- Health care services
- Depression/mental illness
- Immunizations
- Developmental problems

### Programs Working Well in Community

WIC
FAMIS
Early Intervention
CHKD
Resource Mothers
ROCK Richmond
CHIP
Healthy Start
CDPAS
CARE-A-VAN
Midwife services
SIDS
Local Health Department

*Majority of respondents indicated positive experiences when they contacted the local or state health departments in the past year.*

Most needed, not received service was DENTAL

**Primary Reason:**
Lack of Money
Lack of Health Insurance
Lack of Providers

### Recommendations

- Increase efforts to educate the public about the health status and risk factors associated with Maternal and Child Health;
- Increase efforts to teach citizens how to practice healthy behaviors;
- Increase access to useful data resources that speak to the needs of the community;
- Increase data utilization to assess the health status of the community;
- Increase efforts to include lower income populations in data gathering and needs assessment planning by providing individual survey to organizations that serve this population to elicit feedback;
- Provide an on-going feedback mechanism for individuals and/or organizations to offer information, requests or suggestions;
- Continue to monitor the health status of Maternal and Child Health populations;
- Provide a Web site with information regarding children/teenagers and women's health issues and provide feedback mechanism.

### Suggestions to improve Health Status of MCH Populations and Recommendations

A recurring theme that emerged from the survey results is that individuals and organizational respondents mostly use sources other than the state health department for health information and advice. Both the individual and organizational respondents suggested that the state health department increase its efforts in informing and educating the public and families about health issues and prevention. Most of the respondents relied on their health care providers or the Internet for their health related information.

Individual and organizational respondents suggested that the health department needed to ensure that health programs are working and available to all, to help individuals receive quality health care, and to inform and educate the public and families about health issues and prevention.

This suggests that respondents want the state health department to take more of an active role in overseeing the health status of children/teenagers and women by monitoring the resources available to the community.

To receive a copy of the full report, email Susan Kennedy Spain at SusanK.Spain@vdh.virginia.gov.

# APPENDIX E

## ASSESSMENT OF THE OFFICE OF FAMILY HEALTH SERVICES' CURRENT CAPACITY FOR SERVING MCH POPULATIONS

In September 2004 OFHS staff participated in a 2-day meeting to assess the OFHS's internal capacity to serve the MCH populations. During the assessment OFHS strengths, weaknesses, opportunities and threats were identified. The following summarizes these:

### OFHS STRENGTHS

A. Capacity, expertise, and track records in key areas within programs
B. Data Sources
C. Capacity in some areas of information sharing
D. Strengths in collaboration and connection with stakeholders
E. Workforce and contract capacity with VA institutions of higher education
F. Existing training and professional development within VDH
G. Workforce capacity with existing organizations

### OFHS WEAKNESSES

A. Inadequate intra-agency organizational structures or mechanisms to support OFHS work and mission
B. Inconsistent OFHS-level systems, mechanisms for priority setting and planning
C. Lack of data capacity, utilization, collaboration, and application
D. Lack of data tracking on public information seeking and dissemination
E. Inadequate resources
F. Inadequate Stakeholder Involvement in Key Areas
G. Lack of Visibility
H. Inconsistent work, connection, quality improvement with institutions of higher education
I. Gaps in access to services

### OPPORTUNITIES for OFHS

A. Commitment to and interest in data

B. Some increased data capacity/areas to build on (e.g., committees, staff, other sources of data)
C. Cross-program collaboration
D. Programmatic capacity and track record in public informational activities
E. Create and maximize use of OFHS Annual Report to increase visibility, and summarize and integrate key program information across office, etc.
F. Stakeholder relationships and partnerships
G. Workforce capacity with VA institutions of higher education
H. Existing staff capacities, skills, competencies
I. National and VA focus on workforce shortages and competencies
J. Collaborate across OFHS programs to increase training opportunities provided to staff
K. Maximize technology for workforce development/training (e.g., teleconferencing, blackboards)

**THREATS to OFHS**

A. External Data Threats
B. Data Capacity Threats
C. External and political "red flags"
D. Stakeholders
E. Constraints on hiring (e.g., rigidity of core competencies, salary levels)
F. Impact of political realities
G. Local health department ability to opt out of services with no analysis/no for alternative services
H. Linguistic and cultural competence is an issue bigger than MCH
I. Reimbursement Dental and others (Medicaid)

**Areas of Established OFHS Capacity-related Strengths**

- Access to up-to-date science, policy, and programmatic information (although there is a need to use it more efficiently)
- Workforce capacity reinforced through job descriptions, etc.
- Have a process to provide feedback to LHDs with technical assistance in specific programs
- Have written programmatic protocols

- Access to timely program and population data
- TA in dental health services
- Exemplary efforts in safety seats, etc.
- State health department/agencies/program relationships (overall)
- Relationships with mental health
- Relationships with local providers of health and other services
- Relationships with professional associations (AAP)
- Relationships with national sources of data
- Relationships with state and local policymakers within established parameters
- Relationships with non-governmental advocates and funders
- Communication and data translation skills
- Ability to work effectively with public and private organizations
- Ability to influence the policymaking process (within parameters)
- Experience and expertise in working with and in communities
- Knowledge of MCH issues in many areas

***Overall Key Themes Resulting from OFHS CAST-5***

Several *overall* key themes emerged during participant discussions over the two-day meeting.

- Significant OFHS strengths and capacity in: 1) relationships with key stakeholders, 2) staff expertise across a wide variety of health, program, and functional areas, and 3) workforce and contract capacity with Virginia institutions of higher education.
- Support for MCH issues and programs from key leadership (e.g., Secretary for Health and Human Resources).
- Limited "authority" over local health districts due to local control. Where opportunities exist for exerting influence over the local health districts (e.g., funding of local health districts and the contracting process), OFHS efforts are often limited and inconsistent.
- Lack of funding overall and particularly for some mandated programs that result in a need to maximize existing resources and find better ways of doing business.
- Continued need at the community level for OFHS to serve as a safety net for direct services with less consistent movement toward core public health functions across the state. This

factor is coupled with a state public health system that is chiefly organized around a medical model.

- Need for better data collection, analysis and use to: 1) inform programmatic decision-making, 2) enhance accountability and quality improvement in OFHS programming particularly with regard to the local level, 3) drive improvements in MCH outcomes, 4) better identify emerging public health issues, and 5) educate key stakeholders (e.g., general public, policymakers, partners, community organizations) about the work of OFHS.
- Expressed interest in and need for greater leadership in developing stronger, collaborative intra-agency and interagency systems of care that are focused on and organized around serving similar populations.
- Expressed interest in and need for developing an OFHS strategic plan and priority-setting process.
- Expressed interest in and need for creating and/or strengthening OFHS-wide organizational systems that could improve staff's day-to-day work and productivity (e.g., contracting), and be designed to keep staff more informed.

# APPENDIX F

## Improving Health for Virginia's Families:

### Priority Setting and Strategic Planning Workshop

### June 15 and 16, 2005

### Richmond, Virginia

Agenda

Wednesday June 15 (Priority Setting)

| | |
|---|---|
| 8:30 - 8:45 | Introduction of Participants<br>Overview of the Day |
| 8:45 - 9:30 | Review of the Needs Assessment Process in MCH<br>MCH Data Sources for Decision-Making<br>Needs as Values |
| 9:30 - 10:15 | Suggesting Areas of Importance<br>Group Task #1 |
| 10:15 - 10:30 | BREAK |
| 10:30 - 11:15 | Data Derived from the Virginia Five-Year Needs Assessment |
| 11:15 - 12:00 | Refining Areas of Importance<br>Group Task #2 |
| 12:00 - 12:45 | LUNCH |
| 12:45 - 1:15 | Report Back: Identifying Priorities |

| | |
|---|---|
| 1:15 - 1:45 | Suggesting Solutions |
| 1:45 - 2:00 | BREAK |
| 2:15 - 3:45 | Suggesting Solutions<br>Group Task #3 |
| 3:45 - 4:30 | Report Back<br>Full Group Discussion<br>Voting, if necessary<br>Five-Year Priorities Recommended |

# APPENDIX G

# Title V Priority Setting Meeting

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